

## DOCUMENT RESUME

ED 458 703

EA 031 417

AUTHOR Buechler, Mark  
TITLE Updated Catalog of School Reform Models. Program Report.  
INSTITUTION Northwest Regional Educational Lab., Portland, OR.; National Clearinghouse for Comprehensive School Reform, Washington, DC.  
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.  
PUB DATE 2001-10-31  
NOTE 263p.; Part of the School Improvement Program directed by Robert E. Blum. For the First Edition of this catalog, see ED 439 510; for the Addendum to the Catalog, see ED 437 732.  
CONTRACT ED-01-R-0-001  
AVAILABLE FROM Northwest Regional Educational laboratory, 101 SW Main Street, Suite 500, Portland, OR 97204. Tel: 800-547-6339 (Toll Free). For full text:  
<http://www.nwrel.org/scpd/catalog/index.shtml>.  
PUB TYPE Reference Materials - Directories/Catalogs (132) -- Reports - Descriptive (141)  
EDRS PRICE MF01/PC11 Plus Postage.  
DESCRIPTORS \*Educational Change; Elementary Secondary Education; Instructional Effectiveness; \*Instructional Innovation; \*Models; \*Program Descriptions; Program Effectiveness; Program Evaluation; School District Reorganization  
IDENTIFIERS \*Reform Efforts

## ABSTRACT

The 2001 catalog focuses on updating existing models, reviewing models selected for the first edition, and offering an improved Web site. Sixty-three school-reform models are considered. Thirty-two are entire-school models, 11 are reading or language arts models, 6 are mathematics models, and 4 are science models. Ten other models are not tied to an academic subject. Criteria for selecting models include evidence of effectiveness, extent of replication, implementation assistance provided to schools, and comprehensiveness. Each entry provides the model's origin and scope, general description, results, cost, student populations, special considerations, selected evaluations, sample sites, and contact information. Implementation assistance has separate categories for project capacity, faculty buy-in, initial training, follow-up coaching, networking, and implementation review. A concise summary in table format provides founder, year established, number of schools served, goals, main features, impact on instruction, impact on organization/staffing, impact on schedule, subject-area programs, parental involvement, technology, and materials. The models are not ones "approved" by the Northwest Regional Educational Laboratory, the National Clearinghouse for Comprehensive School Reform, or the U.S. Department of Education for any federally-funded program. The models in this catalog have met certain criteria that suggest they have the potential to help schools improve student performance. Many models not in the catalog have the potential to improve student performance. The use of the catalog to limit the choice of models by schools is discouraged. (RKJ)

THE Northwest Regional Educational Laboratory

# PROGRAM REPORT

ED 458 703

## UPDATED CATALOG OF SCHOOL REFORM MODELS

Task 2  
Event No. 8  
Deliverable 16208

October 31, 2001

Submitted by  
Mark Buechler

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

School Improvement Program  
Robert E. Blum, Director

Northwest Regional Educational Laboratory  
101 S.W. Main Street, Suite 500  
Portland, Oregon 97204

EA031417

Sponsored by



Office of Educational  
Research and Improvement  
U.S. Department of Education

BEST COPY AVAILABLE

## Catalog of School Reform Models

After joining forces in April 2000, NWREL and the National Clearinghouse for Comprehensive School Reform (NCCSR) spent the better part of 2000 reviewing new models for inclusion. In 2001 NWREL/NCCSR focused on

1. updating existing descriptions of models to reflect current information
2. re-reviewing models originally selected for the first edition of the catalog
3. developing a more efficient and informative catalog Web site

**Updated Descriptions:** NWREL/NCCSR distributed a form to all model developers requesting updated information on number of implementations, costs, sample sites, and contacts, which was incorporated into existing model descriptions. The form also requested information on each model's experience serving specific student populations (ELL, special education, rural, urban, and high poverty) and on components of the model that address challenges associated with these populations.

**Re-reviewing:** For the first edition of the catalog (published March 1998), 44 models were selected without formal review. This year we asked developers of these models to submit formal applications, and panels are reviewing the applications under the same criteria that have been used for all other models added to the catalog since the first edition. Those that do not meet the criteria will be removed from the catalog. During the first review session in August, panels reviewed 11 additional whole-school models and accepted 6 for continued inclusion. Revised descriptions of these models have been added to the Web site. The 5 that were not accepted are appealing the decision. The rest of the models will be reviewed in November 2001 or February 2002. The following list shows how the number of models has varied over the past three years:

Year	Action	Total # of Models
1998	44 models selected for inclusion	44
1998-99	20 additional models accepted through review process	64
2000	5 additional models accepted through review process	69
2000-01	3 models indicated that they no longer offer services	66
2001 (Oct.)	3 whole-school models withdrew	63

**New Web site:** In March 2001, a new catalog Web site was launched. The site gives users an opportunity to search for models by type of model, grades served, and special populations/focus (described above). It provides updated information on models, additional information on the catalog history and processes, multiple options for viewing descriptions, and guidance for users on selecting models and on comprehensive reform in general. Additional enhancements are planned. The Web site address is <http://www.nwrel.org/scpd/catalog>.

# **CATALOG OF SCHOOL REFORM MODELS**

October 2001

---

**Produced by:**

Northwest Regional Educational Laboratory  
101 SW Main Street, Suite 500  
Portland, Oregon, 97204

National Clearinghouse for Comprehensive School Reform  
2121 K Street NW, Suite 250  
Washington, DC 20037-1801

**Catalog of School Reform Models Web Site: <http://www.nwrel.org/scpd/natspec/catalog/>**

This publication is based on work sponsored wholly or in part by the U.S. Department of Education under contract number ED-01-R-0001. The content of this publication does not necessarily reflect the views of the department or any other agency of the U.S. government. Articles and information in this publication are in the public domain and may be reproduced and disseminated without permission. Please acknowledge NWREL/NCCSR as a source.

# Table of Contents

PREFACE.....	iii
--------------	-----

## ENTIRE-SCHOOL MODELS

Accelerated Schools Project (K–8).....	2
America's Choice School Design (K–12) .....	6
ATLAS Communities (PreK–12) .....	10
Audrey Cohen College: Purpose Centered Education (K–12) .....	14
Center for Effective Schools (K–12) .....	17
Child Development Project (K–6) .....	21
Coalition of Essential Schools (K–12) .....	25
Community for Learning (K–12).....	29
Co-nect Schools (K–12) .....	33
Core Knowledge (K–8).....	37
Different Ways of Knowing (K–8) .....	41
Direct Instruction (K–6).....	45
Edison Schools (K–12) .....	49
Expeditionary Learning Outward Bound (K–12) .....	53
High Schools That Work (9–12).....	57
High/Scope Primary Grades Approach to Education (K–3).....	61
Integrated Thematic Instruction (K–12) .....	65
<i>MicroSociety®</i> (K–8).....	70
Modern Red Schoolhouse (K–12) .....	74
Montessori (PreK–8) .....	78
Onward to Excellence (K–12) .....	82
Paideia (K–12) .....	87
QuEST (K–12) .....	91
Roots & Wings (PreK–6).....	95
School Development Program (K–12) .....	100
Success for All (PreK–6) .....	104
Talent Development High School with Career Academies (9–12) .....	109
Talent Development Middle School (4–9) .....	113
The Learning Network (K–8) .....	117
Turning Points (6–8)) .....	121
Urban Learning Centers (PreK–12).....	125
Ventures Initiative and Focus® System (K–12).....	129

## READING/LANGUAGE ARTS MODELS

Breakthrough to Literacy (K-2) .....	134
Carbo Reading Styles Program (K-8) .....	137
CELL/ExLL (PreK-6) .....	141
CORE (K-8) .....	145
Early Intervention in Reading (K-4) .....	149
Exemplary Center for Reading Instruction (K-12) .....	153
First Steps™ (K-10) .....	157
Junior Great Books (K-12) .....	161
Literacy Collaborative (K-2) .....	165
National Writing Project (K-16) .....	169
Reading Recovery (1) .....	173

## MATHEMATICS MODELS

Connected Mathematics Project (6-8) .....	178
Core Plus Mathematics Project/Contemporary Mathematics in Context (9-12) .....	182
Growing with Mathematics (K-5) .....	186
Interactive Mathematics Program (9-12) .....	190
MATH Connections™ (9-12) .....	193
University of Chicago School Mathematics Project (K-12) .....	197

## SCIENCE MODELS

Developmental Approaches in Science, Health and Technology (K-6) .....	201
Foundational Approaches in Science Teaching (6-8) .....	205
GALAXY Classroom Science (K-5) .....	209
Iowa Chautauqua Program (K-12) .....	213

## OTHER MODELS

ACCESS (PreK-1) .....	218
Basic Skill Builders (K-6) .....	222
COMP: Creating Conditions for Learning (K-12) .....	225
Feuerstein's Instrumental Enrichment (4-12) .....	229
HOSTS: Help One Student To Succeed (K-12) .....	233
HOTS: Higher Order Thinking Skills (4-8) .....	237
Lightspan Achieve Now (K-6) .....	241
Positive Action (K-12) .....	245
Responsive Classroom® (K-8) .....	249
Success-in-the-Making (K-9) .....	253

## Preface

Comprehensive school reform involves changes in every aspect of school operations, from classroom instruction to school governance. Some schools develop their own reform approach from within. Others seek assistance from without, particularly from organizations that have developed coherent, research-based approaches, or school reform models.

For schools that use external assistance, selecting the right model is crucial. The process begins with an assessment of school needs, capacities, and goals. Staff then examine a variety of models, identify several that appear promising, and investigate these in greater depth.

The *Catalog of School Reform Models* gathers information on multiple models into a single location, thus facilitating efforts to identify promising models. The catalog contains descriptions of 32 entire-school models, 11 reading/language arts models, 6 mathematics models, 4 science models, and 10 “other” models (critical thinking or classroom management, for example). Each entry analyzes the model’s general approach, results with students, implementation assistance, and costs, among other elements. A table accompanying each entry summarizes this information in a concise format. Demographic data and contact information for at least four sample sites are also included.

Criteria for selecting models included evidence of effectiveness in improving student academic achievement, extent of replication, implementation assistance provided to schools, and comprehensiveness.

It is important to note that the catalog is not a list of models “approved” by NWREL, NCCSR, or the U.S. Department of Education for any federally funded program. The models in this catalog have met certain criteria that suggest they have the potential to help schools improve student performance. There are many models not in this catalog that also have that potential. NWREL and NCCSR discourage states, districts, and others from using the catalog to limit the choice of models by schools.

For more information on the models, the selection process, and comprehensive school reform in general, please visit the catalog Web site at:

<http://www.nwrel.org/scpd/catalog/>

## **Entire-School Models**

## Accelerated Schools Project (K-8)

IN BRIEF Accelerated Schools	
<b>Founder</b>	Henry Levin, Stanford University
<b>Current Service Provider</b>	National Center for Accelerated Schools Project at the University of Connecticut, and various regional centers
<b>Year Established</b>	1986
<b># Schools Served (5/1/01)</b>	1,300
<b>Level</b>	primarily K-8
<b>Primary Goal</b>	bring children in at-risk situations at least to grade level by the end of sixth grade
<b>Main Features</b>	<ul style="list-style-type: none"><li>gifted-and-talented instruction for all students through "powerful learning"</li><li>participatory process for whole school transformation</li><li>three guiding principles (unity of purpose, empowerment plus responsibility, and building on strengths)</li></ul>
<b>Impact on Instruction</b>	adapt instructional practices usually reserved for gifted-and-talented children for all students
<b>Impact on Organization/ Staffing</b>	governance structure that empowers the whole school community to make key decisions based on the Inquiry Process
<b>Impact on Schedule</b>	depends on collective decisions of staff
<b>Subject-Area Programs Provided by Developer</b>	no
<b>Parental Involvement</b>	parent and community involvement is built into participatory governance structure
<b>Technology</b>	depends on collective decisions of staff
<b>Materials</b>	training materials, <i>Accelerated Schools Resource Guide</i>

### Origin/Scope

The accelerated schools approach, developed by Henry Levin of Stanford University, was first implemented in 1986 in two San Francisco Bay Area elementary schools. The Accelerated Schools Project has now reached over 1,300 schools.

### General Description

Many schools serve students in at-risk situations by remediating them, which all too often involves less challenging curricula and lowered expectations. Accelerated schools take the opposite approach: they offer enriched curricula and instruction programs (the kind traditionally reserved for gifted-and-talented children) intended to help at-risk students perform at grade level by the end of sixth grade. Members of the school community work together to transform every classroom into a "powerful learning" environment, where students and teachers are encouraged to think creatively, explore their interests, and achieve at high levels.

No single feature makes a

school accelerated. Rather, each school community uses the accelerated schools philosophy and process to determine its own vision and collaboratively work to achieve its goals. The philosophy is based on three democratic principles: unity of purpose, empowerment coupled with responsibility, and building on strengths.

Transformation into an accelerated school begins with the entire school community examining its present situation through a process called taking stock. The school community then forges a shared vision of what it wants the school to be. By comparing the vision to its present situation, the school community identifies priority challenge areas. Then it sets about to address those areas, working through an accelerated schools governance structure and analyzing

problems through an Inquiry Process. The Inquiry Process is a systematic method that helps school communities clearly understand problems, find and implement solutions, and assess results.

## Results

To date, no large-scale, systematic evaluations that compare student achievement in accelerated schools with that in control schools have been conducted. However, the Accelerated Schools Project has contracted with the Manpower Demonstration Research Corporation to conduct a rigorous study of accelerated schools, focusing on student achievement among other variables. The study should be completed sometime in 1999. In the meantime, smaller-scale evaluations and case studies have yielded evidence of improved achievement, school climate, and parent and community involvement in numerous accelerated schools across the country. For example, an evaluation comparing an accelerated school to a control school revealed that over a two-year period, fifth grade SRA scores in reading, language arts, and mathematics at the accelerated school climbed considerably. Over the same period, the scores of a control school declined. In another accelerated school, Metropolitan Achievement Test (MAT6) grade-equivalent scores in reading improved more than scores in a control school in four of five grades, although the results for language scores were mixed. Evaluations conducted by accelerated schools satellite centers in Louisiana, Missouri, and South Carolina also provide evidence of improved student achievement and other measures at many accelerated schools.

## Implementation Assistance

- **Project Capacity:** National Center for the Accelerated Schools Project at Stanford University; 12 satellite centers across the country based in state departments of education, universities, and school districts.
- **Faculty Buy-In:** 90% of the school community (all teaching and nonteaching staff plus a representative sample of other school community members including parents and district personnel) must agree to transform the school into an accelerated school. Students are also involved in age-appropriate discussions during the buy-in process.
- **Initial Training:** For each accelerated school, the National Center or a satellite center trains a principal, a designated coach (often from the district office), and a school staff member who will serve as an internal facilitator. Training involves an intensive five-day summer workshop, two subsequent two-day sessions on Inquiry and Powerful Learning, and ongoing mentoring by a center staff member. The coach provides two days of training for the whole school community just before the school year begins.
- **Follow-Up Coaching:** During the first year of implementation, the coach provides the equivalent of at least four additional days of training. Coaches also spend 25% of their time (generally at least one day per week) supporting their school. In the early stages, the coach is more of a trainer, introducing the process and guiding school community members through the first steps of implementation. In later stages, the coach helps schools evaluate how well the model is working, assists in overcoming challenges, and continually reinforces the accelerated schools philosophy to keep momentum alive.

- **Networking:** The National Center and satellite centers host an annual national conference (as well as regional conferences), publish newsletters, support Web sites, and maintain a listserver connecting teachers, coaches, and centers via e-mail. Networking opportunities also enable accelerated school communities to interact with each other on a regular basis.
- **Implementation Review:** Continual self-evaluation is part of the process in accelerated schools. To help schools gather information, the National Center has developed an Assessment Toolkit with five “tools”: (1) a school questionnaire, (2) a coach’s journal, (3) a school data portfolio for organizing quantitative data, (4) guidelines for collecting school documents, and (5) benchmarks to compare each school with a “model” accelerated school.

## Costs

The Accelerated Schools Project (National Center and satellite centers) charges \$13,000-\$15,000 per year for a Basic Partnership Agreement (minimum three-year commitment) that includes, in the first year:

- training of a coach, principal, and school staff member (excluding travel expenses)
- training materials, including three copies of the *Accelerated Schools Resource Guide*
- one site visit by a project staff member
- technical assistance by phone, fax, and e-mail
- monthly networking opportunities
- a year-end retreat
- a subscription to newsletters and the project’s electronic network

In addition, schools and/or districts must provide release time for the entire teaching staff for two days of initial training and the equivalent of four days of additional training during the first year. They must also schedule weekly meeting time amounting to about 36 hours per year and cover 25% of the full-time salary and benefits of the coach (estimated at \$12,000-\$20,000 for a coach external to the school).

Over the next two years schools receive targeted professional development in key components of the model, on-going technical assistance, monthly networking opportunities, and a site visit by a project staff member. Schools may contract with a center for additional site visits and other services as needed.

## Student Populations

The accelerated schools process is generally adopted by schools with high proportions of students in at-risk situations. However, there is nothing in the process itself — essentially a restructuring process based on collective decisions of the school community — that limits it to such schools.

## Special Considerations

The accelerated schools process can be a challenging one. Teachers and administrators must be willing to relinquish hierarchical decision-making structures, work together, and expend considerable time and energy to transform a traditional school into an accelerated school. Founder Henry Levin estimates that this process can take three to five years. During this time, it is crucial to maintain regular meeting time and active coaching at the school site.

## Selected Evaluations

### Developer

Knight, S. L., & Stallings, J. A. (1995). The implementation of the accelerated school model in an urban elementary school. In R. L. Allington & S. A. Walmsley (Eds.), *No quick fix: Rethinking literacy programs in America's elementary schools* (236-251). New York: Teachers College Press.

McCarthy, J., & Still, S. (1993). Hollibrook Accelerated Elementary School. In J. Murphy & P. Hallinger (Eds.), *Restructuring schooling: Learning from ongoing efforts* (pp. 63-83). Newbury Park, CA: Corwin.

### Outside Researchers

State of Louisiana Board of Elementary and Secondary Education. (1997). *Statewide exemplary program*. Baton Rouge, LA: Author.

North Carolina Partnership for Accelerated Schools. (1996). *Accelerated Schools Project 1995-96 program description*. Raleigh, NC: Author. (Evaluation conducted by independent consultant)

English, R. A. (1992). *Accelerated schools report*. Columbia: University of Missouri-Columbia.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Memorial School Complex (PreK-4) 39 Harvard Road, Box 37 Lancaster, MA 01523 978-368-8482 Contact: Patricia Liner Kemper	441	rural	3%	0%	<1%	3%	94%	0%	10%	18%
Sheppard Accelerated Elementary (K-6) 1777 West Avenue Santa Rosa, CA 95407 707-547-7050 Contact: Gail Ahlas	601	urban fringe of large city	3%	5%	9%	58%	25%	83%	55%	14%
Academy of Accelerated Learning (PreK-5) 3727 S. 78th Street Milwaukee, WI 53220 414-327-5782 Contact: Susan Miller	521	large city	18%	1%	34%	5%	42%	73%	38%	18%
World of Wonder Accelerated Learning Community (K-3) 4411 Oakridge Drive Dayton, OH 45417 937-542-3600 Contact: Dick Penry	246	mid- size city	95%	0%	0%	1%	4%	95%	0%	2%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

## For more information, contact:

Gene Chasin, Director  
National Center for Accelerated Schools Project  
University of Connecticut  
2131 Hillside Road, Unit 3224  
Storrs, CT 06269

Phone: 860-486-6330  
Fax: 860-486-6348  
E-mail: [info@acceleratedschools.net](mailto:info@acceleratedschools.net)  
Web site: <http://www.acceleratedschools.net>

## America's Choice (K-12)

IN BRIEF	
America's Choice School Design	
<b>Founder</b>	National Center on Education and the Economy
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1989
<b># Schools Served (Jan. 1998)</b>	300
<b>Level</b>	K-12
<b>Primary Goal</b>	enabling all students to reach internationally benchmarked standards
<b>Main Features</b>	<ul style="list-style-type: none"><li>• performance standards and reference examinations</li><li>• five key design tasks (standards and assessments, student learning, teacher training, community supports, and parent-public involvement)</li></ul>
<b>Impact on Instruction</b>	learning is focused on getting all students to standards, varying only the time and resources needed, using prevention, early intervention, and acceleration strategies
<b>Impact on Organization/Staffing</b>	schools must hire a Design Coach, among other part- or full-time staff; a "class teacher" follows a student for 3 years; elementary school teachers specialize in reading or math; high school teachers work in interdisciplinary teams
<b>Impact on Schedule</b>	schedule provides extra time for students not meeting standards; in K-2, a daily 2½ hour literacy block
<b>Subject-Area Programs Provided by Developer</b>	yes
<b>Parental Involvement</b>	one of five key design tasks
<b>Technology</b>	none required
<b>Materials</b>	provided

many districts have developed.

The America's Choice School Design incorporates a standards-based curriculum focused on the basics, conceptual mastery, and applications. It includes a design for quickly identifying students who are falling behind and bringing them back to standard, as well as a planning and management system for making the most efficient use of available resources to raise student performance quickly. The design focuses in the early years on literacy in reading, writing, and mathematics and at the high school level on a demanding academic core intended to get all students ready for college.

The America's Choice Reference Examinations measure student progress toward achieving the performance standards developed by NCEE. The Planning for Results system helps school staffs quickly identify weak spots in student performance and address them. America's Choice helps schools redesign their master schedule and extend the school day and week to give students the extra time they need to get to the standards, no matter where they start.

### Origin/Scope

The America's Choice Comprehensive Design Network (begun in 1989 as the National Alliance for Restructuring Education) is a program of the National Center on Education and the Economy in Washington, D.C. There are 300 America's Choice schools in 14 states as of January 1998.

### General Description

The America's Choice School Design is a comprehensive design for schools determined to get their students to high, internationally benchmarked standards in English, mathematics, and science. America's Choice was developed by the National Center on Education and the Economy (NCEE), a leading source for standards-based education in the United States. The design is built on the America's Choice Performance Standards and Assessments Program, begun in 1992 as New Standards. The America's Choice performance standards complement and extend the content standards that the states and

The America's Choice Network also designs accountability systems for districts that include rewards and consequences for schools based on their performance, systems for allocating control over funds to schools, school performance monitoring and review systems, and special assistance for low performing schools.

## Results

Early results in schools in Kentucky and Chicago show significant improvements in scores on standardized tests. Of the 15 original Alliance schools in Kentucky, 13 (87%) earned cash rewards in 1995, the first year of that state's incentive program, compared with 38% of schools statewide.

From 1992 to 1996, an average of 74% of Kentucky's Alliance schools met or exceeded their performance goals — some of the toughest performance goals in the country. In Louisville, Kennedy Elementary School has seen a 25% increase in recent Kentucky Instructional Results Information System (KIRIS) scores across all grades.

In Chicago, about 80% of Alliance schools showed notable increases in their scores on citywide tests. Further, in one year these schools recorded a notable increase in fourth, eighth, and tenth-grade student performance on the New Standards Reference Examinations in language arts and mathematics. Additionally, 23-49% of students taking the exams moved from the lowest category (little evidence of achievement) to the second or third of a five-category scoring rubric.

## Implementation Assistance

- **Project Capacity:** The National Center for Education and the Economy has a staff of 100. Main offices are in Washington, D.C.; Rochester, New York; Fort Worth, Texas; and Oakland, California. The Center partners regularly with the University of Pittsburgh's Learning Research and Development Center and has regional coordinators who work directly with America's Choice schools around the country.
- **Faculty Buy-In:** A substantial majority of the school faculty must be committed to the comprehensive America's Choice School Design.
- **Initial Training:** Each school designates a Design Coach, who is responsible for working with the principal and school leadership team to implement the design, and a Literacy Coordinator (for K-8 schools), who leads implementation of the literacy program. These staff members attend intensive, multiple-week training institutes to prepare for certification as leaders in America's Choice professional development programs. Certified school staff members then lead the entire faculty through a series of workshops to put the design elements in place. The workshops include (a) an introduction to performance standards, (b) a primer on the use of examinations referenced to standards, (c) a course on matching curriculum to standards, (d) a workshop on interpreting data from new examinations, and (e) a guide to data-based planning that is referenced to standards. Additionally, each school principal participates in a special principals' network focused on school design and implementation.
- **Follow-Up Coaching:** The Design Coach and Literacy Coordinator provide continuing support to the school staff. Additionally, the America's Choice Design team provides up to seven days per year of on-site technical assistance.
- **Networking:** Annual national conference, quarterly newsletter, Web site, and a special network for principals.

- **Implementation Review:** Each year the school staff participates in a session focused on analyzing the results of their work and planning for the next steps in implementation. During site visits, the America's Choice staff helps the principal and leadership team monitor implementation and strengthen design elements.

## Costs

For schools that adopt this design, the cost is approximately \$65,000 per year (assuming about 500 students per school). Schools or districts may contract for additional services. In addition, requirements for participation include significant commitment to the design on the part of the faculty. K-8 schools must provide a full-time on-site Literacy Coordinator, along with a School Design Coach and Community Outreach Coordinator (the latter two serving between half- and full-time, depending on the size of the school). High schools provide a full-time, on-site Design Coach, as well as a half- or full-time (depending on school size) School-to-Career Coach and Community Coordinator. In addition, schools may need to provide tutoring and other specified assistance during non-school hours.

## Student Populations

America's Choice has served disadvantaged and minority students, along with students learning English. The design has been implemented in Title I, rural, and urban schools.

## Special Considerations

None.

## Selected Evaluations

### Developer

*Working towards excellence: Results from schools implementing New American Schools designs.* (1997). Arlington, VA: New American Schools.

### Outside Researchers

Bodilly, S., with Purnell, S., Ramsey, K., & Keith, S. J. (1996). *Lessons from New American Schools Development Corporation's demonstration phase*. Santa Monica, CA: RAND.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Sheldon Clark High School HC 63 Box 810 Inez, KY 41224 606-298-3591 Contact: John Haney	780	rural	0%	1%	0%	0%	99%	46%	0%	10%
J.E.B. Stuart Middle School 4815 Wesconnett Boulevard Jacksonville, FL 32210 904-573-1000 Contact: Carol Daniels	1077	urban fringe of large city	44%	1%	3%	4%	48%	68%	1%	5%
P.S. 16 41-15 104th Street Corona, NY 11368 718-505-0140 Contact: Audrey Murphy	1500	large city	0%	0%	98%	<1%	<1%	89%	20%	1%

R.E. Davis Elementary 345 Eastern School Road Sumter, SC 29153 803-495-3243 Contact: Brenda Bowens	240	urban fringe of large city	86%	0%	0%	0%	13%	86%	0%	25%
--	-----	--	-----	----	----	----	-----	-----	----	-----

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

**For more information, contact:**

Judith Curtis  
National Center on Education and the Economy  
One Thomas Circle, Suite 700  
Washington, DC 20005  
Phone: 202-783-3668  
Fax: 202-783-3672  
E-mail: [jcurtis@ncee.org](mailto:jcurtis@ncee.org)  
Web site: <http://www.ncee.org>

## ATLAS Communities (PreK-12)

IN BRIEF ATLAS Communities	
<b>Founder</b>	Coalition of Essential Schools, Education Development Center, Project Zero, School Development Program
<b>Current Service Provider</b>	ATLAS Communities
<b>Year Established</b>	1992
<b># Schools Served (5/1/01)</b>	105
<b>Level</b>	preK-12
<b>Primary Goal</b>	develop preK-12 pathways organized around a common framework to improve learning outcomes for all students
<b>Main Features</b>	<ul style="list-style-type: none"><li>• preK-12 pathways</li><li>• development of coherent K-12 educational programs for every student</li><li>• authentic curriculum, instruction, and assessment</li><li>• whole-faculty study groups</li><li>• school/pathway planning and management teams</li></ul>
<b>Impact on Instruction</b>	teachers focus on active inquiry and are attuned to students' individual strengths and limitations
<b>Impact on Organization/Staffing</b>	each preK-12 pathway has a pathway coordinator supported by the district (0.5-1.0 FTE depending on the number and size of schools in the pathway)
<b>Impact on Schedule</b>	within schools, teachers meet in study groups; across pathway schools, teachers need time to plan together
<b>Subject-Area Programs Provided by Developer</b>	no
<b>Parental Involvement</b>	parent and community involvement is integral to the ATLAS approach; many schools have family centers
<b>Technology</b>	no special technology required
<b>Materials</b>	all ATLAS materials provided

dimensions of education that cut across the grade span, across the curriculum, and across the many different constituencies involved in education. In ATLAS Communities educators, students, their families, civic leaders, business people, and cultural institutions all become deeply invested in the learning process.

For the past five years, ATLAS Communities has been working with pathways of schools in districts across the country to:

- Improve learning outcomes for all students (Teaching and Learning);
- Evaluate student work through a variety of standard and innovative assessment tools (Assessment);

### Origin/Scope

ATLAS Communities was formed in 1992 as a partnership of four leading educational organizations: Education Development Center, the Coalition of Essential Schools, Project Zero, and the School Development Program. There are 105 ATLAS schools.

### General Description

ATLAS Communities is a design for educational reform linking elementary, middle, and high schools as partners in creating a pathway of teaching and learning from kindergarten through grade 12. Its goal is to create a coherent educational program for each student and to help all students develop the habits of mind, heart, and work they will need as informed citizens and productive workers in the 21st century. Thus, ATLAS goes beyond basic literacies, enabling students to develop an understanding of important concepts, to reason, to solve real-world problems, and to cherish others and their environments.

ATLAS addresses

- Engage teachers in serious and sustained professional development (Professional Development);
- Involve families and other members of the community in the education of their children (Learning Community); and
- Reorganize the internal structures and decision-making processes within schools and districts to support all of the above (Management and Decision-Making).

These are the key elements of the ATLAS Communities framework. Instead of focusing on selected elements, ATLAS believes that all of the parts must be connected to the whole. In order for school change to be sustained, these elements must be fully integrated.

## Results

Standardized test scores have increased in all pathways that have worked with the ATLAS framework for three years or more. In Prince George's County, Maryland, for example, elementary reading scores on the CTBS test rose an average of 13% in two years. In Norfolk, Virginia, there was a 15% increase on the Test of Achievement Proficiency for research, writing, and science in the 11th grade.

Performance-based, statewide assessments also show strong gains. In Gorham, Maine, fourth grade scores on the state assessment were the highest in the district's history. In Prince George's County, Maryland, there has been marked improvement in middle school math, language, science, and social studies scores on the state assessment.

Schools have also reported a decline in discipline problems and drop-out rates, while attendance and parental involvement have increased.

## Implementation Assistance

- **Project Capacity:** In addition to its central office in Newton, Massachusetts, ATLAS places site developers on-site for each pathway. ATLAS has the capacity to add up to 15 new pathways each year.
- **Faculty Buy-In:** School and district staffs must support implementation of the ATLAS design, but ATLAS does not specify the process or the percentage who must approve.
- **Initial Training:** ATLAS holds an initial three- to five-day institute on-site for all faculty members from each school in the pathway.
- **Follow-up Coaching:** An ATLAS Site Developer for each pathway provides customized technical assistance, works closely with school and district staff, organizes professional development activities, brokers additional resources as needed, and ensures that the ATLAS framework is in full operation. The ATLAS Community Study Group Specialist works intensively with each pathway during the initial year to launch whole-faculty study groups in the pathway schools.
- **Networking:** Annual Principals' Institute, regional institutes, cross-site institutes, site visits and use of the World Wide Web for discussion and professional development.
- **Implementation Review:** Each year site developers work with the pathway and school leadership groups to evaluate progress against benchmarks and plan the next year's goals and activities.

## Costs

The cost information that follows applies to schools and districts that began implementing the model during the 2000-2001 school year. All quoted costs apply to schools with fewer than 1,000 students. ATLAS provides comparable services each year for three years.

- For a single school, the implementation cost is \$65,000-\$85,000 per year for three years, depending on a range of factors such as geographic location and number of students.
- For a three-school pathway, the cost is \$60,000 per school per year.
- For five or more schools in a pathway, the cost is \$55,000 per school per year.

In addition to these costs, a district also must appoint a part- or full-time coordinator (depending on the number of schools involved).

## Student Populations

ATLAS Communities has served disadvantaged and minority students, along with students learning English. ATLAS has been implemented in Title I and urban schools.

## Special Considerations

An ATLAS Community pathway typically consists of a minimum of three schools (one elementary, one middle, and one high school). ATLAS recommends that districts complete the pathway engagement process three to six months prior to the initial training institute.

## Selected Evaluations

### Developer

*Working towards excellence: Results from schools implementing New American Schools designs.* (1997). Arlington, VA: New American Schools.

### Outside Researchers

Bodilly, S., with Purnell, S., Ramsey, K., & Keith, S. J. (1996). *Lessons from New American Schools Development Corporation's demonstration phase*. Santa Monica, CA: RAND.

Rosenblum Brigham Associates. (forthcoming, 1998). *Assessing the Impact*. South Weymouth, MA: Author.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./Alaskan	Asian Amer.	Hisp.	White			
Keeseville Elementary School 1825 Main Street Keeseville, NY 12944	480	rural	2%	0%	<1%	<1%	0%	33%	0%	0%
Rhodes Middle School 29th & Clearfield Streets Philadelphia, PA 19132 215-227-4402 Contact: Gwen Baggett	1,003	large city	99%	0%	0%	1%	<1%	95%	0%	0%
Norview High School 1070 Middleton Place Norfolk, VA 23513 757-441-5865 Contact: Marjorie Stealey	1,779	mid-size city	71%	<1%	3%	1%	25%	64%	0%	0%

Boynton K-8 Learning Community 12800 Visger Detroit, MI 48217 Contact: Ronald Peart	756	large city	79%	<1%	0%	4%	17%	80%	0%	0%
---	-----	---------------	-----	-----	----	----	-----	-----	----	----

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

**For more information, contact:**

Sandra J. Wellens  
Education Development Center  
55 Chapel Street  
Newton, MA 02158  
Phone: 617-969-7100 or 617-618-2401  
Fax: 617-969-3440  
E-mail: [atlas@edc.org](mailto:atlas@edc.org)  
Web site: <http://www.edc.org/ATLAS/>

# Audrey Cohen College: Purpose-Centered Education® (K-12)

IN BRIEF	
Audrey Cohen College: Purpose-Centered Education®	
<b>Founder</b>	Audrey Cohen College
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	invented in 1970
<b># Schools Served (Jan. 1998)</b>	16
<b>Level</b>	K-12
<b>Primary Goal</b>	development of scholarship and leadership abilities using knowledge and skills to benefit students' community and larger world
<b>Main Features</b>	<ul style="list-style-type: none"><li>student learning focused on complex and meaningful Purposes</li><li>students use what they learn to reach specific goals</li><li>Constructive Actions (individual or group projects that serve the community)</li></ul>
<b>Impact on Instruction</b>	classes structured around five Dimensions that incorporate core subjects
<b>Impact on Organization/ Staffing</b>	full-time staff resource specialist required
<b>Impact on Schedule</b>	scheduling can vary due to organization of classes around Dimensions and Constructive Actions
<b>Subject-Area Programs Provided by Developer</b>	yes (detailed guides realigning traditional core subjects to Purposes and Dimensions)
<b>Parental Involvement</b>	parents become Purpose Experts, helping further student achievement in classrooms and community
<b>Technology</b>	none required
<b>Materials</b>	provided

are needed for achieving a Purpose and that operate as the standards students are expected to reach. From kindergarten through high school, these Purpose-Achievement Standards are developed and assessed each semester. These standards are correlated by the College to fully address all the requirements of local and state mandates for high academic performance. Examples of the Standards include:

- Select a worthwhile and feasible goal for action
- Give and receive communications, using speech, reading, writing, and other modes of expression
- Select and apply mathematical skills for effective problem solving, communication, and reasoning.

## Origin/Scope

Purpose-Centered Education was invented in 1970 for kindergarten through the bachelor's and master's level by Audrey Cohen College, an accredited, private, non-profit institution of higher educators based in New York City. There are now 16 schools in six states.

## General Description

Purpose-Centered Education focuses all student learning on the achievement of meaningful Purposes that contribute to the larger global society. There are 24 Purposes, generally one for each semester at each grade level. Examples include: We Work for Safety® (Grade 1), We Work for Good Health® (Grade 4), and We Use Science and Technology to Help Shape a Just and Productive Society® (Grade 10). All core subjects — including English /language arts, mathematics, science and social studies — are focused on the semester's Purpose.

The College also has identified 24 essential abilities that

Students meet their Standards and achieve their Purpose by using their knowledge and skills to plan, carry out, and evaluate a Constructive Action® that benefits the community. At the elementary level, each class may achieve its Purpose as a group, planning and implementing a Constructive Action in the community with the guidance of a teacher. Older students, under the guidance of their teachers, plan and implement individual Constructive Actions. Through Constructive Actions, students from kindergarten through grade 12 learn how the world works and how they can make a positive contribution to the larger world.

Instead of taking classes separated by subject area, students take Dimension® classes that incorporate core subjects while eliminating fragmentation. There are five Dimension classes: Purpose, Values and Ethics, Self and Others, Systems, and Skills.

## Results

Schools using Purpose-Centered Education report improvement in student achievement, along with reduced discipline incidents and increased attendance and parental involvement. Additionally, several of Audrey Cohen's newer schools have also improved their standardized test scores. From 1994-95, scores of fifth graders at Simmons Elementary School on the Iowa Test of Basic Skills (ITBS) improved 25 points in reading, 21 points in language, and 12 points in math. At Benjamin Franklin Elementary School in San Diego, students in second and third grades improved in reading and math on a state-mandated test from 1994 to 1995. At Alcott Elementary School in San Diego, Stanford Achievement Test scores rose in math, reading, and language from 1993 to 1995. And at Sabal Palm Elementary School in North Miami Beach, fourth graders surpassed district and state averages on the Florida State Writing Assessment in 1994-95.

## Implementation Assistance

- **Project Capacity:** Headquarters for the design are at Audrey Cohen College in New York City. Audrey Cohen College assigns a liaison to every district with schools using the design. In addition, the staff provides regular on-site technical assistance.
- **Faculty Buy-In:** The design defers to the decision-making procedures used by the school district and individual school.
- **Initial Training:** An initial five-day orientation prepares teachers and administrators to use Purpose-Centered Education.
- **Follow-Up Coaching:** After the initial orientation, professional staff development visits are coordinated with individual schools. There are eight on-site visits the first year, six the second year, and five the third year. In subsequent years, the number of on-site staff visits are jointly determined by the College and the school. The College also assigns a district liaison to work with the principal, teachers, parents, and a staff resource specialist selected from within each school. Thus, the College provides training, guidelines, materials, prototypes, and ongoing support to help schools implement its comprehensive system of education.
- **Networking:** Electronic network, information resource bulletin, and Web site.
- **Implementation Review:** Audrey Cohen College's National Director for Quality Assurance makes regular visits to schools to ensure quality of design implementation.

There is also a yearly review process to gauge progress using Purpose Quality Indicators, benchmarks for successful implementation.

## Costs

Audrey Cohen College charges a one-time licensing fee of \$7,000. Other fees are detailed in the table below:

Fee	Year 1	Year 2	Year 3	Year 4
<b>Training</b>	\$36,685	\$23,345	\$22,425	\$10,000
<b>Materials</b>	\$7,878	\$6,325	\$4,025	Billed at prevailing rate

Internal costs to the school/district usually include the per diem rate per teacher for a five-day, on-site orientation; a full-time or equivalent staff resource specialist (usually filled by existing personnel); and Purpose Trips (four per year per student). Reduction of fees is possible for multiple schools in a district.

## Student Populations

Purpose-Centered Education is in use in rural, suburban, and urban schools for students with diverse educational needs and backgrounds — from native born to immigrant, from affluent to at-risk, from gifted to special needs. Audrey Cohen College also works in multicultural and multilingual settings.

## Special Considerations

Purpose-Centered Education does not require waivers on standardized tests and can be implemented with the use of existing funds.

## Selected Evaluations

### Developer

*Working towards excellence: Results from schools implementing New American Schools designs.* (1997). Arlington, VA: New American Schools.

### Outside Researchers

Bodilly, S., with Purnell, S., Ramsey, K., & Keith, S. J. (1996). *Lessons from New American Schools Development Corporation's demonstration phase.* Santa Monica, CA: RAND.

## Sample Sites

Contact Audrey Cohen College for information on demonstration sites.

## For more information, contact:

Janith Jordan  
Audrey Cohen College  
75 Varick Street  
New York, NY 10013-1919

Phone: 212-343-1234, ext. 3400  
Fax: 212-343-8472  
E-mail: [JanithJ@aol.com](mailto:JanithJ@aol.com)  
Web site: <http://www.audrey-cohen.edu>

## Center for Effective Schools (K-12)

IN BRIEF Center for Effective Schools	
<b>Founder</b>	Beverly Bancroft, Larry Lezotte, and Barbara Taylor at Michigan State University
<b>Current Service Provider</b>	Phi Delta Kappa International Center for Effective Schools
<b>Year Established</b>	1986 (at Michigan State University)
<b># Schools Served (5/1/01)</b>	19 since 1998; more than 1,000 overall
<b>Level</b>	K-12
<b>Primary Goal</b>	to improve the academic achievement of all students
<b>Main Features</b>	a continuous improvement process based upon the precepts that: <ul style="list-style-type: none"><li>• all children can and will learn</li><li>• increased academic achievement is the mark of effectiveness</li><li>• the unit of change is the individual school within a systemic arena</li><li>• improvement plans must involve all stakeholders</li></ul>
<b>Impact on Instruction</b>	increased teacher ownership in instructional decision making
<b>Impact on Organization/Staffing</b>	increased levels of teacher leadership in school reform
<b>Impact on Schedule</b>	maximizing of instructional time
<b>Subject-Area Programs Provided by Developer</b>	no
<b>Parental Involvement</b>	central to the process
<b>Technology</b>	off-the-shelf database management software can be used for analysis and tracking
<b>Materials</b>	books, video series, and other materials are provided

curriculum. The model provides a framework for school reform based on seven correlates, or guiding principles. These correlates, derived from empirical investigations and case studies of schools that have successfully taught the intended curriculum of basic skills to all students, are:

- A clear and focused mission on learning for all
- Instructional leadership
- High expectations for all stakeholders
- Opportunity to learn and student time on task
- Frequent monitoring of student progress
- Safe and orderly environment for learning
- Positive home/school/community relations

### Origin/Scope

The Effective Schools Model began with research conducted in the 1970s by Ron Edmonds and others on characteristics, or "correlates," that distinguish unusually effective schools from less effective ones. In 1986, Beverly Bancroft, Larry Lezotte, and Barbara Taylor organized the Center for Effective Schools (CES) at Michigan State University to help schools implement the correlates. In 1995, the Center moved to Bloomington, Indiana, where it became the Phi Delta Kappa International Center for Effective Schools. (Lezotte, in the meantime, left to form a private company, Effective Schools Products.) CES has served 19 schools since 1998 and more than 1,000 overall.

### General Description

The Effective Schools Model is based on the conviction that all children, regardless of race, socioeconomic status, or gender, can and will learn the required

Under the Effective Schools Model, the individual school is viewed as the unit of improvement. Each school, through a faculty-administrator-parent-community team-planning approach, uses student achievement data and the seven correlates to develop and implement a long-range improvement plan. In addition, the model promotes districtwide, systemic restructuring for continuous improvement. Districts are advised that the process takes at least three years to fully implement.

## Results

An ongoing multiyear CES project involving 200 teachers and nearly 14,000 students in six northern Ohio school districts (two urban, two suburban, and two rural) is being studied by Phi Delta Kappa consultants. With data available for five of the six districts from a variety of reading, language arts, and math tests, scores showed an overall pattern of increases across the grades tested over a two-year period (1996-98). For example, in one district, reading and language arts scores improved by 2 to 7 NCEs in all grades tested (one, three, five, and seven). Math scores improved by 2 to 5 NCEs in grades one, three, and five, and remained the same in grade seven.

One of these six districts — Elyria City Schools — has also engaged in numerous other long-term Effective Schools initiatives over the years, including sponsorship of faculty who attend state-government Effective Schools retreats, establishment of an office to help schools develop and implement Effective Schools approaches, and incorporation of Effective Schools principles in school board policy. Participating in this process, several Elyria schools have registered impressive gains in student performance. For example, at Cascade Elementary School, where approximately 60 percent of students are eligible for subsidized lunch, the percentage of sixth graders passing state proficiency tests improved from 61 percent in 1996 to 77 percent in 1998. Also, the percentage of second and third graders more than half a year below grade level in reading declined from 30 percent in 1991-92 to 18 percent in 1998, despite an influx of learning disabled students. At Crestwood Elementary School, where approximately 50 percent of students are eligible for subsidized lunch, the percentage of sixth graders passing state tests improved from 73 percent in 1996 to 88 percent in 1998; the percentage of fourth, fifth, and sixth graders more than half a year below grade in reading declined from 21 percent in 1991-92 to 10 percent in 1998.

The Spring Branch School District in Houston has been working with CES since the late 1980s. At Westwood Elementary, where 54 percent of students were eligible for subsidized lunch in 1998, the percentage of fourth grade students who passed the Texas assessment tests (TAAS) increased from 85 percent (1994) to 98 percent (1998) in reading, and from 71 percent (1994) to 87 percent (1998) in math. Similar gains were registered in fifth grade. At Hollibrook Elementary School, a school with a predominantly Hispanic student population where almost 90 percent of the children are on the free lunch program, the percentage of third grade students mastering the Texas Educational Assessment of Minimum Skills (TEAMS) improved as follows: in math, from 77 percent (1988) to 96 percent (1990); in reading, from 65 percent (1988) to 86 percent (1990); and in writing, from 58 percent (1988) to 81 percent (1990).

## Implementation Assistance

- **Project Capacity:** The Phi Delta Kappa International Center for Effective Schools has three satellites: the Northeast Regional Satellite at Kent State University, the Central Regional Satellite at University of Oklahoma, and the Southwest Regional Satellite in

Phoenix. All work under the direction of headquarters staff in Bloomington. Satellite centers are also planned for the southeast, northwest, and Pacific regions. CES offers awareness training, continuous improvement design, and evaluation services to schools throughout the U.S. and Canada. Regionally based CES consultants provide onsite support services.

- **Faculty Buy-In:** Participants in the Effective Schools Process must reflect stakeholders from the entire school community, and the seven correlates must be embraced as the mosaic for all continuous improvement planning.
- **Initial Training:** A diagnostic of the school/district is completed before training begins. Based on the findings of this diagnostic, the following services may be provided during the first year: customized training, consulting services, technical assistance, implementation support, related professional development, networking, and availability to demonstration sites. Awareness training is a typical first step. The training involves a two-day experience followed by two days of follow-up later in the year.
- **Follow-Up Coaching:** The second year of the process involves the formation of a leadership team, a needs assessment, the development and implementation of continuous improvement action plans, and an ongoing evaluation process. Consultant assistance is provided throughout this phase. The third year involves at least three onsite visits providing an audit of progress, a review of data, and assurance testing that the process is on track.
- **Networking:** Participating schools/districts have access to all of the resources and contacts of the CES and its parent organization, Phi Delta Kappa International.
- **Implementation Review:** Data on implementation is utilized throughout the process, using the diagnostic as the baseline. During the third year a report card provides a narrative of progress and a recommendation for future directions.

## Costs

Costs are based on the specific plan agreed upon between the participating school/district and CES. Specific costs depend on the need, size of school/district, and level of involvement. A sliding cost schedule is available based on increased district involvement and/or multiple schools' participation. Average costs are \$70,000-\$90,000 per school for a three-year plan.

## Student Populations

The Effective Schools Model is based upon the belief that all children can and will learn, regardless of race, socioeconomic background, or gender. Thus, the model has equal application to all school settings.

## Special Considerations

Schools/districts adopting the Effective Schools Model for continuous improvement must endorse the belief that all children can learn and must involve all stakeholders in the school improvement process.

## Selected Evaluations

### Developer

*Serious school reform: The Redesign of classroom instruction.* (1998). Bloomington, IN: Phi Delta Kappa.

### Outside Researchers

No third-party evaluations of the work of CES with schools are available. There are, however, numerous books and articles on other Effective Schools initiatives (for example, those initiated by school districts or by trainers affiliated with other organizations). The following documents are representative: Lezotte, L. W., & Bancroft, B. A. (1985). School improvement based on Effective Schools research: A promising approach for economically disadvantaged and minority students. *The Journal of Negro Education*, 54(3): 301-312. Taylor, B., & Bullard, P. (1994). *Keepers of the dream: The triumph of Effective Schools*. Chicago: Excelsior!

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Breeke Elementary 1400 Martin Luther King Oxnard, CA 93030 805-485-1224 Contact: Anthony Zubia	951	urban fringe of large city	<1%	0%	1%	96%	5%	76%	76%	0%
Chavez Elementary 224 North Juanita Avenue Oxnard, CA 93030 805-483-2389 Contact: Julia Vallapando	878	urban fringe of large city	1%	0%	<1%	97%	2%	91%	75%	0%
Berlin Elementary 20 Center Street Berlin Heights, OH 44814 419-588-2079 Contact: Linda Moon	350	rural	1%	0%	<1%	4%	95%	14%	0%	22%
Tallmadge Middle School 76 North Avenue Tallmadge, OH 44278 330-633-4994 Contact: Greg Misch	675	urban fringe of large city	2%	0%	1%	<1%	97%	9%	0%	12%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

## For more information, contact:

Center for Effective Schools  
Phi Delta Kappa International  
408 North Union  
PO Box 789  
Bloomington, IN 47402-0789  
Phone: 800-766-1156  
Fax: 812-339-0018  
E-mail: [effective.schools@pdkintl.org](mailto:effective.schools@pdkintl.org)  
Web site: <http://www.pdkintl.org>

## Child Development Project (K-6)

IN BRIEF Child Development Project	
<b>Founder</b>	Developmental Studies Center
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1981
<b># Schools Served (5/1/01)</b>	165
<b>Level</b>	K-6
<b>Primary Goal</b>	to help schools become caring communities of learners that promote students' intellectual, social, and ethical development
<b>Main Features</b>	<ul style="list-style-type: none"><li>literature-based reading and language arts curriculum</li><li>cooperative learning</li><li>developmental discipline</li><li>schoolwide community-building activities</li><li>parent involvement activities</li><li>restructuring to support teacher collaboration, planning, reflection</li></ul>
<b>Impact on Instruction</b>	changes in classroom organization and management; changes in some aspects of instruction (content and pedagogy)
<b>Impact on Organization/ Staffing</b>	school site project coordinator needed
<b>Impact on Schedule</b>	3-day summer institute; release time during school year
<b>Subject-Area Programs Provided by Developer</b>	yes (literature-based reading and language arts)
<b>Parental Involvement</b>	family participation activities are coordinated with the curriculum; parents have opportunities for membership on a school coordinating team
<b>Technology</b>	none required
<b>Materials</b>	provided

### Origin/Scope

The Child Development Project (CDP) was created by the Developmental Studies Center of Oakland, California, in 1981. The program has been implemented in 165 schools.

### General Description

The Child Development Project is an approach to school restructuring that revamps teaching, learning, school organization, school climate, and teachers' work environments to promote the intellectual, social, and ethical development of students. The CDP seeks to transform schools into communities where children feel cared for and learn to care in return — communities that help students develop the academic and practical skills needed to function productively in society, and the ethical and intellectual skills needed to function humanely and wisely.

The program has five main components:

#### 1. Literature-Based Reading

**and Language Arts:** This component explicitly integrates ethical content into the curriculum and focuses on teaching for understanding. The selection of books, the accompanying teachers' guides, and the supporting workshops are all designed to help teachers encourage children to think deeply about what they read. Teachers lead students in open-ended discussions of important issues evoked by the books and provide structured opportunities for students to discuss these issues with one another.

**2. Collaborative Classroom Learning:** This component emphasizes the importance of learning to work with others in fair, caring, and responsible ways. The program provides 25 general lesson formats that can be used in various academic areas, plus 10 sample activities to illustrate each format.

3. **Developmental Discipline:** Developmental discipline is an approach to classroom management that focuses on building caring, respectful relationships among all members of the classroom community. It uses problem-solving approaches rather than rewards and punishments to promote student responsibility.
4. **Parent Involvement:** This component incorporates two avenues for parent involvement: (a) family participation activities that are coordinated with the curriculum and relevant to family interests, and (b) membership on a school "coordinating team" of parents and teachers who plan schoolwide activities.
5. **Schoolwide Activities:** The school coordinating team examines traditional schoolwide activities to ensure that they allow participation by all, avoid competition, and respect difference while lessening divisions between students, teachers, and parents.

## Results

There have been three separate quasi-experimental studies of CDP over the past 16 years. The schools (17 program and 17 matched comparison schools) participating in these evaluations have been diverse in setting, student population, and ethnicity. The program has been found to result in (a) significant increases in students' sense of their school as a community and in their school-related attitudes, motivation, and behavior; (b) significant increases in a variety of social and ethical outcomes, including conflict resolution skills and commitments; and (c) significant decreases in students' involvement in alcohol and marijuana use.

Effects on academic achievement reported in these studies were less pronounced. In one study, sixth-grade students in three CDP schools scored higher on reading comprehension tests (developed by the CDP) than counterparts in the control schools, but the advantages disappeared in a middle school follow-up study. A larger study of schools in six districts reported few differences between CDP and control schools either on reading comprehension tests or standardized achievement tests. In one district, however, students in CDP schools significantly outperformed control-school students on state-developed performance-based tests in reading, mathematics, science, and social studies during the three years of program intervention.

Data from other CDP schools show considerable improvement in reading and math scores. At one CDP school, the percentage of students characterized as "novice readers" (based on Kentucky Instructional Results Information System scores for fourth graders) dropped from 41 the first year of implementation to 3 five years later, while the percentage of "novices in math" dropped from 65 to 32. Over the same period, another CDP school witnessed drops in reading and math novices from 45 to 7 and 86 to 45, respectively. Similar improvements in basic reading and math skills have been reported in over 20 other CDP schools.

## Implementation Assistance

- **Project Capacity:** The Developmental Studies Center, located in Oakland, California, has approximately 50 full-time professional staff. In addition, the center can draw upon many practitioner/trainers from around the country to provide professional development services.
- **Faculty Buy-In:** After participating in an initial orientation session, a minimum of 80% of the school faculty must indicate support (by secret ballot) for the implementation of CDP. The school must agree to focus its reform efforts on CDP for a minimum of three years. Both the school and the district must make other specific commitments to the program including providing a project coordinator at the school site and release time for

staff development, coaching, and collegial planning and support.

- **Initial Training:** Initial training in CDP is provided by Developmental Studies Center staff during three-day summer institutes each year, conducted at or near the school site. Teachers are provided with all CDP instructional and curricular materials.
- **Follow-Up Coaching:** Program staff make three weeklong visits to the site during each school year to conduct follow-up workshops and work with individuals or small groups on coaching, planning, and problem solving. In addition, teachers meet regularly during the year ("partner study and support") for collegial planning and study.
- **Networking:** Consultation with program staff is available by telephone (toll free), fax, and e-mail. The Developmental Studies Center also supports a Web site and provides electronic forums (discussion listservs) to facilitate the exchange of information and resources by e-mail.
- **Implementation Review:** The principal is expected to monitor implementation on an ongoing basis, and program staff assess implementation during site visits. In addition, Developmental Studies Center research staff collect implementation data to determine progress, areas in need of improvement, and priorities for additional staff development services. Technical assistance and research instruments for evaluating program implementation and outcomes are available.

## Costs

The total cost to a school for instructional and curricular materials is approximately \$550 per classroom teacher. The cost to the school for professional development services is approximately \$40,000 per year (assuming visits by two program staff members will involve long distance travel). Additional costs may be required to compensate teachers for attending summer institutes and to provide release time for teachers for follow-up workshops, coaching, and collegial planning.

## Student Populations

CDP has been implemented in urban, suburban, and rural schools serving a wide variety of student populations, including disadvantaged and minority students, and students learning English as a second language. A large proportion of current CDP sites are schoolwide Title I schools.

## Special Considerations

CDP is a systemic reform effort that affects all aspects of schooling. Teachers must be committed to collaborative planning and decision making, establishing a climate of mutual trust and respect, focusing their efforts on implementing CDP throughout the school, and establishing the structures and routines that support reflective practice and continuous improvement. The Developmental Studies Center estimates that it takes a minimum of three years in most schools to achieve effective implementation of CDP throughout the school.

## Selected Evaluations

### Developer

Battistich, V., Schaps, E., Watson, M., & Solomon, D. (1996). Prevention effects of the Child Development Project: Early findings from an ongoing multisite demonstration trial. *Journal of Adolescent Research, 11*, 12-35.

Battistich, V., Solomon, D., Watson, M., & Schaps, E. (1997). Caring school communities. *Educational Psychologist, 32*, 137-151.

Solomon, D., Watson, M., Battistich, V., Schaps, E., & Delucchi, K. (1996). Creating classrooms that students experience as communities. *American Journal of Community Psychology, 24*, 719-748.

### Outside Researchers

Coburn, C. E., & Meyer, E. R. (1998, April). *Shaping context to support and sustain reform*. Paper presented at the meeting of the American Educational Research Association, San Diego, CA.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Bel Aire Park Elementary 3580 Beckworth Drive Napa, CA 94558-2846. 707-253-3775 Contact: Melissa Strongman	415	mid-size city	0%	2%	2%	35%	61%	53%	33%	7%
Sedgwick Elementary 19200 Phil Lane Cupertino, CA 95014-3566 408-252-3103 Contact: Lynn Shimada	656	urban fringe of large city	3%	1%	36%	8%	53%	16%	4%	6%
Lowell Elementary 1409 Linton Avenue St. Louis, MO 63107-1116 314-534-5050 Contact: Audrey Washington	449	large city	96%	0%	1%	0%	4%	95%	0%	0%
Frayser Elementary 1230 Larchmont Avenue Louisville, KY 40215-2232 502-485-8255 Contact: Rebecca Harmon	489	large city	50%	0%	1%	<1%	48%	87%	0%	16%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

## For more information, contact:

Denise Wood  
Developmental Studies Center  
2000 Embarcadero, Suite 305  
Oakland, CA 94606  
Phone: 510-533-0213  
Fax: 510-464-3670  
E-mail: [dsc\\_information@devstu.org](mailto:dsc_information@devstu.org)  
Web site: <http://www.devstu.org>

## Coalition of Essential Schools (K-12)

IN BRIEF Coalition of Essential Schools	
<b>Founder</b>	Ted Sizer, Brown University
<b>Current Service Provider</b>	Coalition of Essential Schools National Center and various regional centers
<b>Year Established</b>	1984
<b># Schools Served (Jan. 1998)</b>	251
<b>Level</b>	K-12 (original focus was 9-12)
<b>Primary Goal</b>	help create schools where students learn to use their minds well
<b>Main Features</b>	<ul style="list-style-type: none"><li>• set of Common Principles upon which schools base their practice</li><li>• personalized learning</li><li>• mastery of a few essential subjects and skills</li><li>• graduation by exhibition</li><li>• sense of community</li></ul>
<b>Impact on Instruction</b>	depends on how each school interprets the Common Principles (may involve interdisciplinary instruction, authentic projects, etc.)
<b>Impact on Organization/ Staffing</b>	depends on how each school interprets the Common Principles (may involve new staff, lower pupil/teacher ratio, etc.)
<b>Impact on Schedule</b>	depends on how each school interprets the Common Principles (may involve team teaching, common planning time, block scheduling, etc.)
<b>Subject-Area Programs Provided by Developer</b>	no
<b>Parental Involvement</b>	encouraged
<b>Technology</b>	none required
<b>Materials</b>	none required

students have little opportunity to think deeply about important issues or produce work that means anything to them.

In response, Sizer formulated nine Common Principles that he believed would lead to better teaching and more genuine learning in American high schools:

1. The school's focus should be to help students learn to use their minds well.
2. Less is more. Students should achieve a thorough understanding of a few essential skills and subjects rather than a casual acquaintance with many.
3. The school's goals should apply to all students.
4. Teaching and learning should be personalized to the greatest possible extent.
5. The school's governing metaphors should be student-as-worker and teacher-as-coach.
6. To graduate, students should demonstrate mastery through public exhibitions rather than credits, grades, and test scores.

### Origin/Scope

The Coalition of Essential Schools was founded by Ted Sizer of Brown University in 1984. Twelve high schools in seven states joined the Coalition that year. At present, there are 251 full members, 275 planning schools, and 558 exploring schools.

### General Description

The Coalition of Essential Schools is a national network of schools and centers engaged in restructuring schools to promote better student learning. The schools share a set of ideas known as the Common Principles, which guide their whole-school reform efforts.

The Coalition was founded in an attempt to address the problems of the American high school as identified in the five-year Study of High Schools (1979-84), which was chaired by Ted Sizer. Teachers, Sizer concluded, often use practices they know do not support student learning: 50-minute periods, lecture, drill. Partly as a result,

7. The school's climate should be one of "unanxious expectation," trust, and decency.
8. Teachers and administrators should consider themselves generalists first and specialists second, assuming joint responsibility for all students.
9. The school should aim for the following administrative and budgetary targets: 80 students per teacher; adequate time for teachers to plan together; competitive salaries; and per pupil costs not to exceed that of traditional schools by more than 10%.

The Coalition recently added a tenth principle encouraging schools to honor diversity, challenge inequity, and model democratic practices.

These core principles are intended to serve not as a blueprint for education reform, but as a set of guidelines to help schools redesign themselves. Consequently, the Coalition imposes no specific curricular innovations or instructional techniques on member schools. Rather, it seeks out exemplars — schools that have done an especially good job of translating some or all of the principles into practice — and shares their approaches with schools.

## Results

Some essential schools, such as Central Park East Secondary School in East Harlem, have become famous for inspired work with students. Over 90% of Central Park's ninth graders graduate, for example, compared with 55% citywide. Of the graduates, over 90% attend college. Evidence also suggests that two overarching approaches used by essential schools, "authentic pedagogy" and "sense of community," can lead to higher student achievement (see MacMullen, 1996). Many of the schools in these studies were not themselves essential schools, however. The *Special Strategies* study (Stringfield et al., 1997), one of the few that has examined test scores in essential schools, found little improvement on CTBS reading and math scores in four essential schools. This and other studies (see Muncey & McQuillen, 1996, for example) also have noted how difficult it can be to put essential school principles into practice in comprehensive high schools. Even where schoolwide implementation is incomplete, these studies generally note that selected teachers make profound changes in classroom practice.

## Implementation Assistance

- **Project Capacity:** National center at Brown University; more than 20 regional centers around the country; National Re:Learning Faculty, a core of more than 150 practitioner/trainers selected from member schools.
- **Faculty Buy-In:** A "substantial majority" of teachers must agree to apply the principles.
- **Initial Training:** The Coalition has offered a range of training opportunities, among them summer institutes and "Treks" — year-long school change experiences for teams of teachers. A Trek opens with a weeklong summer seminar, during which the teams are assembled into groups of three. These triads then serve as "critical friends," sustaining and critiquing each other during the change process. Over the past few years, the Coalition has been decentralizing operations by supporting the formation of regional centers: autonomous, independently funded local organizations that assume responsibility for essential school membership and professional development activities in their areas. Professional development opportunities offered to particular schools depend on the regional center that serves them. By the year 2000, the Coalition plans to shift all professional development activity to regional centers.
- **Follow-Up Coaching:** As mentioned above, Treks involve collaboration and training over a period of a year or more (the Bay Area Coalition of Essential Schools, for

example, offers a second Trek workshop and follow-up during a school's second year of membership). Additionally, most regional centers provide on-site coaching upon request.

- **Networking:** The Coalition hosts national conferences and supports a Web site. It publishes *HORACE* (each issue exploring a single aspect of the Coalition's work), the PERFORMANCE series (which highlights schools demonstrating significant progress), and other series on exhibitions and school change. Regional centers also offer networking opportunities for member schools.
- **Implementation Review:** The Coalition has no standard mechanism for assessing implementation at member schools. It has studied implementation at selected schools, released publications on the results, and modified its approach accordingly. Member schools also have opportunities (such as the Trek triads) to examine their own progress.

## Costs

The ninth Coalition principle suggests that expenditures in essential schools should not exceed those of traditional high schools by more than 10%. On that basis, an essential school with 500 students receiving \$5,000 per student might spend as much as \$250,000 per year. The vast majority of that money would not go directly to the Coalition, however, but would be used to lower the pupil/teacher ratio, provide extra planning time for teachers, etc. In most cases, however, essential schools spend far less, either because they start with a core group of teachers rather than a schoolwide implementation or they implement selected principles rather than all 10. As for direct costs, fees vary from regional center to regional center, but a full range of programs and services including regular on-site coaching, networking meetings, regional conferences, Trek summer institutes and "critical friends" school visits, workshops and seminars on curriculum/assessment/instruction, and evaluation of school progress would cost approximately \$50,000 per year.

## Student Populations

All types of schools have joined the Coalition, from inner city high schools serving large numbers of at-risk and minority students to high schools located in affluent suburbs.

## Special Considerations

The Coalition does not offer schools a standard curriculum or process for school change. Rather, it offers principles for school reform that (a) need to be interpreted and adapted to local conditions and (b) if fully realized, will result in significant changes in traditional practice.

## Selected Evaluations

### *Developer*

Cushman, K. (1991, September). Taking stock: How are essential schools doing? *Horace*, 8(1).

### *Outside Researchers*

MacMullen, M. M. (1996). *Taking stock of a school reform effort: A research collection and analysis*. Providence, RI: Annenberg Institute for School Reform.

Muncey, D. E., & McQuillan, P. J. (1996). *Reform and resistance in schools and classrooms: An ethnographic view of the Coalition of Essential Schools*. New Haven: Yale University Press.

Stringfield, S., Millsap, M. A. Herman, R., Yoder, N., Brigham, N., Nesselfodt, P., Schaffer, E., Karweit, N., Levin, M., & Stevens, R. (1997). *Urban and suburban/rural special strategies for educating disadvantaged children: Final report*. Washington, DC: U.S. Department of Education.

## Sample Sites

Demonstration schools may be visited in many areas of the country. Contact the national center or the nearest regional center for information. (Check the Coalition's Web site for regional center addresses and phone numbers.)

### For more information, contact:

Hudi Podolsky  
Coalition of Essential Schools  
1814 Franklin Street, Suite 700  
Oakland, CA 94612  
Phone: 510-433-1451  
Fax: 510-433-1455  
E-mail: [hpodolsky@essentialschools.org](mailto:hpodolsky@essentialschools.org)  
Web site: <http://www.essentialschools.org/>

## Community for Learning (K-12)

IN BRIEF Community for Learning	
<b>Founder</b>	Margaret C. Wang, Temple University
<b>Current Service Provider</b>	Laboratory for Student Success
<b>Year Established</b>	1990
<b># Schools Served (5/1/01)</b>	118
<b>Level</b>	K-12
<b>Primary Goal</b>	to achieve social and academic success for students by linking schools with community institutions
<b>Main Features</b>	<ul style="list-style-type: none"><li>• collaboration with homes, libraries, museums, and other places where students can learn</li><li>• coordinated health and human services delivery component</li><li>• site-specific implementation design</li><li>• Adaptive Learning Environments Model of instruction</li></ul>
<b>Impact on Instruction</b>	teams of regular teachers and specialists work together in the classroom, providing individual and small-group instruction for regular and special students; individualized learning plans for all students
<b>Impact on Organization/ Staffing</b>	program facilitator; teacher teams
<b>Impact on Schedule</b>	flexible use of time for instructional teaming and planning (block scheduling)
<b>Subject-Area Programs Provided by Developer</b>	yes
<b>Parental Involvement</b>	parental involvement is an essential component of the design
<b>Technology</b>	no specially designed equipment required
<b>Materials</b>	no specially designed materials required

where regular teachers and specialists (such as special education teachers, Title I teachers, and school psychologists) work in teams to meet the diverse academic and social needs of all children. The instructional component of Community for Learning is called the Adaptive Learning Environments Model (ALEM), an inclusive approach to meeting the learning needs of individual students in regular classes, including students with special needs. As the title suggests, ALEM teachers adapt instruction for each student, using a variety of instructional strategies and grouping patterns (e.g., whole class, small groups, individuals). Students are taught to take responsibility for planning and monitoring their own progress. Learning tasks are divided into

### Origin/Scope

The Community for Learning program (CFL) was developed in 1990 by Margaret C. Wang, Executive Director of the Temple University Center for Research in Human Development and Education (CRHDE). It has been implemented in 118 urban and rural schools in the mid-Atlantic region and across the country. The classroom instruction component, Adaptive Learning Environments Model, was developed under the aegis of the National Follow Through Project and has been implemented in over 200 schools in 22 states.

### General Description

School is not the only place where students learn. They learn in a variety of environments, including libraries, museums, workplaces, and their own homes. CFL links the school to these and other institutions, including health, social services, and law enforcement agencies. The idea is to provide a range of learning opportunities for students, coordinate service delivery across organizations, and foster a community-wide commitment to student success.

The emphasis on collaboration extends into the classroom itself,

small units and evaluated frequently by the teacher, who modifies learning plans and instructional strategies on an ongoing basis. Students progress at their own pace, advancing when ready and taking extra time when necessary. Individualized attention is provided for those who are not progressing well and for those who are exceptionally talented and ready for advanced lessons in given subjects.

Each CFL school has a full-time facilitator, who oversees implementation and assists with training. Districts with clusters of CFL schools generally appoint a project coordinator, who serves as the liaison between schools, the district office, and the CRHDE. The project coordinator, the facilitator, and the principal develop a site-specific plan that mobilizes the school's resources in support of classroom and community-wide implementation.

## Results

Schools in some of the nation's most impoverished inner city areas have achieved positive results following CFL implementation. A study of the first year of implementation of five CFL schools in the District of Columbia (schools identified as among the lowest performing in the district) found that teachers were making significant changes in classroom practice. The study also examined changes in student reading scores on the Stanford 9 and found that (a) scores improved at all five schools; (b) program schools improved more than other elementary schools in the district; (c) the districtwide ranking of program schools climbed considerably (one school jumped from 119<sup>th</sup> to 46<sup>th</sup>, for example); and (d) schools where teachers implemented the program earlier in the year showed more improvement than schools where implementation started later.

At a middle school in inner city Philadelphia where 78% of students are Latino and 93% live below the poverty line, students have shown significantly higher academic progress than students at a control school. A follow-up study of students who had attended this middle school reported that they had a significantly lower dropout rate than their high school peers (19% vs. 60%) and that 48% of them were performing at grade level in the eleventh grade compared to 26% of their peers. A similarly situated elementary school in Houston also witnessed improvements in student achievement, along with positive changes in students' and teachers' attitudes about their school.

## Implementation Assistance

- **Project Capacity:** Implementation is supported by a team of program implementation specialists from the CRHDE.
- **Faculty Buy-In:** Commitment by the consensus of a school's staff is required for whole-school implementation.
- **Initial Training:** An initial two-day planning meeting with facilitators and principals involves: an overview of the program design; a needs assessment process that helps identify training needs at each school; visits to established Community for Learning sites; and the development of an implementation plan for each school. Shortly after this meeting, teachers attend a four-day workshop for training and classroom preparation.
- **Follow-Up Coaching:** Program implementation staff from the CRHDE provide 10-15 days of on-site professional development and technical assistance to teachers and related services staff on an as-needed basis. This assistance is custom-designed for each school based on needs identified by teachers, observations by principals, and implementation assessment data gathered by program staff. Additionally, the project coordinator and

facilitators and principals from participating schools assist with professional development, and successful CFL teachers provide peer coaching and mentoring. The goal is to strengthen capacity at the school and district level to provide professional development and technical support so that a high degree of program implementation can be maintained at each school.

- **Networking:** The CRHDE holds an annual seminar for the network of CFL schools. School facilitators meet periodically for planning. A listserv has been created for CFL teachers to share ideas, and school staff receive research briefs and publications from the CRHDE on a regular basis.
- **Implementation Review:** Implementation is reviewed on an ongoing basis by principals, facilitators, and program staff. Additionally, program staff regularly collect implementation data to determine progress, areas that need improvement, and priorities for training.

## Costs

The CFL program delivery system is built on existing resources and personnel at each school, so costs vary from site to site. Typically, resources are redeployed to provide one facilitator per school without requiring additional funds. The only added cost for most schools is pre-implementation training of school staff and ongoing technical assistance to support program implementation and evaluation. The estimated cost for planning, training, and ongoing technical assistance is \$35,100 per school for years one through three, and \$21,600 for each year thereafter.

## Student Populations

CFL has been implemented in high-poverty, low-performing inner city and rural schools in geographically diverse locations. It has been implemented as a regular education model as well as an inclusive approach to educate children with special needs.

## Special Considerations

To the extent possible, implementation of CFL involves the inclusion of students with disabilities in regular classes with special education support.

## Selected Evaluations

### Developer

Laboratory for Student Success. (1997). *Interim report: First-year implementation of the Community for Learning comprehensive school reform model*. Philadelphia: Author.  
Wang, M. C., Oates, J., & Weishew, N. (1995). Effective school response to student diversity in inner-city schools: A coordinated approach. *Education and Urban Society*, 27(4), 484-502.  
Wang, M. C., & Zollers, N. J. (1990). Adaptive instruction: An alternative service delivery approach. *Remedial and Special Education*, 11(1), 7-21. (focuses on ALEM, the instructional component of the CFL model)

### Outside Researchers

Brookhart, S. M., Casile, W. J., & McCown, R. (1997). *Evaluation of the implementation of continuous progress instruction in the Fox Chapel Area School District 1995-1996*. Pittsburgh: Duquesne University.  
Far West Laboratory. (1980). *Educational programs that work* (7<sup>th</sup> ed.). San Francisco: Author.  
McDowell, F. E. (1986). Adaptive learning model fosters both equity and excellence. *School Administrator*, 43, 20-23. (The latter two studies focus on ALEM, the instructional component of the Community for Learning Program.)

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Simon Elementary School 401 Mississippi Ave., SE Washington, DC 20032 202-645-3360 Contact: Daisy Smith	531	large city	100%	0%	0%	0%	0%	100%	1%	1%
Stetson Middle School ( 5-8) "B" Street & Allegheny Ave. Philadelphia, PA 19134 215-291-4823 Contact: Lucy Rodriguez	1,066	large city	25%	<1%	2%	69%	4%	100%	16%	17%
Central High School RD 1 Box 420 Martinsburg, PA 16662 814-793-2111 Contact: Sam Ebersole	660	rural	<1%	0%	<1%	<1%	99%	7%	<1%	11%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

### For more information, contact:

Frederick McCoy  
 Laboratory for Student Success  
 Temple University Center for Research in Human Development and Education  
 1301 Cecil B. Moore Avenue  
 Philadelphia, PA 19122-6091  
 Phone: 800-892-5550  
 Fax: 215-204-5130  
 E-mail: lss@vm.temple.edu  
 Web site: <http://www.temple.edu/LSS>

## Co-nect (K-12)

IN BRIEF Co-nect	
<b>Founder</b>	BBN Corporation
<b>Current Service Provider</b>	Co-nect
<b>Year Established</b>	1992
<b># Schools Served (5/1/01)</b>	198
<b>Level</b>	K-12
<b>Primary Goal</b>	improved achievement in core subjects
<b>Main Features</b>	<ul style="list-style-type: none"><li>• design-based assistance for comprehensive K-12 school reform</li><li>• customized on-line/on-site training and personal support</li><li>• national "critical friends" program</li><li>• leadership processes for whole-school technology integration</li></ul>
<b>Impact on Instruction</b>	emphasis on authentic problems and practical applications
<b>Impact on Organization/ Staffing</b>	organization of school into small learning communities ("clusters"); full-time facilitator preferred
<b>Impact on Schedule</b>	flexible block scheduling; common planning time for teachers
<b>Subject-Area Programs Provided by Developer</b>	no
<b>Parental Involvement</b>	encouraged
<b>Technology</b>	significant investment required; schools need computers and Internet access for teachers (at least) in order to make the most of the products and services available on-line (Co-nect does not provide equipment)
<b>Materials</b>	provided, both print and on-line

### Origin/Scope

Co-nect was founded in 1992 by members of the Educational Technologies Group at BBN Corporation. By May 2001 there were 198 Co-nect schools.

### General Description

Co-nect helps schools work through a structured process of comprehensive school reform. The primary purpose is to boost academic achievement for all students in core subject areas including mathematics, reading, writing, science, and the social sciences. The design is based on a set of five benchmarks derived from best practices in some of the most effective schools in the United States. The benchmarks include:

- high expectations for all students and schoolwide accountability for results;
- schoolwide emphasis on practical application of academic knowledge to authentic problems;
- use of assessments that

measure actual student and school performance;

- organization of the school into small learning communities (known as "clusters"); and
- sensible use of the best available technology for everyone.

Co-nect provides a combination of on-site and on-line assistance aimed at helping each participating school implement these design benchmarks within a period of three years.

Schools that work with Co-nect need to have computers in every classroom and on every teacher's desk and Internet access for teachers in order to make the most of the products and services available on-line. These computers are connected by a schoolwide local area network (LAN), with shared file storage, printers, and direct, high-speed access to the Internet. Some Co-nect schools also have extensive video production and broadcast facilities.

The Co-nect Exchange, the organization's Web site, delivers specialized professional training for teachers and leaders and supports the growth of a collaborative professional community among participating schools. The exchange offers a rich and growing array of tools, tele-collaborative projects and other curriculum resources, discussion areas, on-line training modules, and membership utilities. The site has been field-tested over a period of three years with thousands of teachers around the United States, and is undergoing continuous development.

Other offerings include: Co-nect Critical Friends (a national school visitation and quality review program); Co-nect Tech (a new program that helps school leaders design processes to integrate technology into the curriculum); and an annual technology conference.

## Results

A number of Co-nect schools around the country have posted gains on standardized test scores since becoming Co-nect schools:

- The ALL School in Worcester, Massachusetts, has seen steady increases in all subject areas (both fourth and eighth grade) on state tests, including gains as high as 23% from 1994 to 1996.
- Campus Elementary School in Memphis, Tennessee, has posted gains in mathematics at grades 4, 5, and 6 and in science in grades 3, 4, 5, and 6.
- The Ohio State Proficiency Test is given every year to fourth and sixth graders. Last year, fourth graders at Roosevelt Elementary, a Co-nect school in Cincinnati, showed improvement on every section of the test: reading, writing, math, science, and citizenship. Overall, Roosevelt gained an average of 9.4 points in the percentage of students scoring "proficient" or better — almost three times the average district gain.
- At Campbell Drive Middle School in Dade County, Florida, the percentage of students scoring 3.0 or higher on Florida Writes!, the state writing assessment, is now up to 72%. This marks the third year in a row of improvement at Campbell Drive. Campbell Drive was the second most improved middle school in Dade County.
- All four Co-nect elementary schools in Cincinnati posted overall gains in the percentage of students scoring "proficient" or higher on the Ohio Proficiency Test for 1997. The average gain for three of the four schools was above the district average. All four middle schools in Dade County and all six elementary schools in Memphis are doing comparatively better than district trends since beginning to work with Co-nect.

## Implementation Assistance

- **Project Capacity:** Headquarters in Cambridge, Massachusetts. One regional office in South Florida with additional regional offices planned (two to three per year). Co-nect currently has 23 full-time employees, about half based in the field.
- **Faculty Buy-In:** Co-nect provides an informational orientation and buy-in process leading to a faculty vote. Co-nect requires 75% vote in favor.
- **Initial Training:** Co-nect provides introductory workshops for the school leadership and school "design teams."
- **Follow-up coaching:** Local site directors (on-site professionals) conduct training workshops throughout the year and work directly with teams and individuals in the schools. Telephone and e-mail support is provided by site directors in other locations as well as by Cambridge-based staff.

- **Networking:** The Co-nect Exchange (see General Description above), Co-nect Critical Friends, and the annual technology conference provide opportunities for networking among participating schools.
- **Implementation Review:** Co-nect closely monitors and regularly reviews the progress of implementation efforts.

## Costs

A number of factors determine the cost of standard three-year implementation, including the size and location of the school and the number of other Co-nect schools in the area. Typically, the cost is \$65,000 per year for three years. This figure assumes a school with up to 40 faculty members, partnering with at least four other schools in the same region. It covers the following services:

- Customized professional development, including workshops for principals, the school design team, and the full faculty
- Three "mini sabbaticals" for four to six faculty members (second and third year only) for capacity building
- Frequent visits by regional Co-nect school consultants to work directly with school faculty members and to conduct customized trainings
- Customized assistance with initial data-gathering, analysis, and planning during the first few months of implementation

In addition, each school must support a full-time school-based facilitator (typically a faculty member) to assist with the change process. The school must provide high-speed classroom Internet access for all teachers (at least by the end of the first year of implementation) to take advantage of online training and resources. Finally, the school must commit to full participation in Co-nect's national conference, the Critical Friends process, training workshops, and other key activities.

## Student Populations

Co-nect has worked primarily with schools in large urban districts. Approximately 80% of students are African American or Hispanic, and 65% receive free or reduced lunch.

## Special Considerations

Technology requirements include computers and high-speed Internet access for all staff.

## Selected Evaluations

### Developer

*Working towards excellence: Results from schools implementing New American Schools designs.* (1997). Arlington, VA: New American Schools.

### Outside Researchers

Bodilly, S., with Purnell, S., Ramsey, K., & Keith, S. J. (1996). *Lessons from New American Schools Development Corporation's demonstration phase*. Santa Monica, CA: RAND.

Additional evaluation information is available from Stephen Ross at the University of Memphis (901-678-3413).

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Southwest Miami Senior High School 8855 SW 59th Terrace Miami, FL 33165 305-274-0181 Contact: Carmen Marinella	3,251	urban fringe of large city	3%	0%	1%	81%	15%	22%	8%	17%
William S. James Elementary School 1 Laurentum Parkway Abingdon, MD 21009 410-638-3900 Contact: Deborah Freels	605	urban fringe of large city	3%	0%	2%	0%	94%	5%	0%	13%
Cypress Elementary School 5400 SW 112th Ct. Miami, FL 33165 305-271-1611 Contact: Faye Haynes	530	urban fringe of large city	1%	0%	1%	69%	29%	38%	23%	25%
Palm Cove Elementary School 11601 Washington Street Pembroke Pines, FL 33025 954-436-4000 Contact: Linda Pazos	1,149	rural	24%	0%	6%	22%	48%	10%	14%	12%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

### For more information, contact:

Heather Corbitt  
 Co-nect  
 1770 Massachusetts Avenue, Suite 301  
 Cambridge, MA 02140  
 Phone: 877-726-6328  
 Fax: 617-955-3103  
 E-mail: [info@co-nect.net](mailto:info@co-nect.net)  
 Web site: <http://www.co-nect.net>

## Core Knowledge (K-8)

IN BRIEF <b>Core Knowledge</b>	
<b>Founder</b>	E. D. Hirsch, Jr.
<b>Current Service Provider</b>	Core Knowledge Foundation
<b>Year Established</b>	1986
<b># Schools Served (5/1/01)</b>	1,020
<b>Level</b>	K-8
<b>Primary Goal</b>	to help students establish a strong foundation of core knowledge for higher levels of learning
<b>Main Features</b>	<ul style="list-style-type: none"><li>sequential program of specific grade-by-grade topics for core subjects</li><li>rest of curriculum (approximately half) left for schools to design</li></ul>
<b>Impact on Instruction</b>	instructional methods (to teach core topics) are designed by individual teachers/schools
<b>Impact on Organization/Staffing</b>	minimal
<b>Impact on Schedule</b>	minimal
<b>Subject-Area Programs Provided by Developer</b>	yes
<b>Parental Involvement</b>	schools are expected to involve parents in planning and resource development
<b>Technology</b>	none required
<b>Materials</b>	detailed material provided

### Origin/Scope

The Core Knowledge Foundation is an independent, non-profit, non-partisan organization founded in 1986 by E. D. Hirsch, Jr. The foundation's essential program, a core curriculum titled the Core Knowledge Sequence, was first implemented in 1990. By May 2001, it was being used in 1,020 schools.

### General Description

Core Knowledge is an approach to curriculum based on the work of E. D. Hirsch and described in his books *Cultural Literacy* and *The Schools We Need and Why We Don't Have Them*. The focus of the approach is on teaching a common core of concepts, skills, and knowledge that characterize a "culturally literate" and educated

individual. The purpose of the approach is to increase academic performance as demonstrated on national and state norm- and criterion-referenced tests, to help narrow the gap between academic "haves" and "have nots," and to build consensus among teachers, parents, and administrators.

Core Knowledge is based on the principle that the grasp of a specific and shared body of knowledge will help students establish strong foundations for higher levels of learning. Developed through research examining successful national and local core curricula and through consultation with education experts in each subject area, the Core Knowledge sequence provides a consensus-based model of specific content guidelines for students in the elementary grades. It offers a progression of detailed grade-by-grade topics of knowledge in history, geography, mathematics, science, language arts, and fine arts, so that students build on knowledge from year to year in grades K-8. Instructional strategies are left to the discretion of teachers.

The Core Knowledge sequence typically comprises 50% of a school's curriculum; the other 50% allows schools to meet state and local requirements and teachers to contribute personal strengths. Teachers are also expected to provide effective instruction in reading and mathematics. The Core Knowledge curriculum is detailed in the *Core Knowledge Sequence Content Guidelines for Preschool through Grade Eight* and illustrated in a series of books entitled *What Your (First-, Second- etc.) Grader Needs to Know*.

Parental involvement and consensus building contribute to the success of the Core

Knowledge Sequence. Parents and community members are invited to be involved in obtaining resources, planning activities, and developing a schoolwide plan. The schoolwide plan integrates Core Knowledge content with district and state requirements and assessments. Additionally, parents and teachers are encouraged to cooperate in planning learning goals and lesson plans.

## Results

A study conducted by Johns Hopkins University is currently in its third year. This study analyzes six established Core Knowledge schools, six Core Knowledge schools deemed promising implementation sites, and four matched control schools. The first year qualitative report outlined the benefits educators observed in the advanced Core Knowledge schools. Students appeared to gain self-confidence and were more interested in learning, and discipline problems decreased. Additionally, teachers described their work lives as more interesting and found that they worked collaboratively more often. Early quantitative data shows slight gains for Core Knowledge students in reading and math on the Comprehensive Tests of Basic Skills and slight gains on the Maryland School Performance Assessment Program in math, social studies, writing, and language use. Core Knowledge students scored worse than controls on science.

Additional studies of single Core Knowledge schools have demonstrated significant improvement in raising the scores of students of low socio-economic status and decreasing the achievement gap between advantaged and disadvantaged students. Data from the Paul H. Cale Elementary School, a Core Knowledge school in Virginia, showed much higher achievement than predicted for disadvantaged students (70% scored higher than national norm on the CAT).

The Nathaniel Hawthorne Elementary School in Texas has also achieved at higher than expected levels. Hawthorne is an inner-city school with a large Hispanic population and a 96% free and reduced lunch rate. Hawthorne adopted the Core Knowledge Sequence in the 1992-93 school year. The average reading pass rate for grades 3-5 in the district is 55%. Hawthorne students enter grade 3 with a 34 % pass rate. By grade 5, Hawthorne students have a 67% pass rate that far exceeds the district's 56% pass rate for grade 5. Gains also were observed in the math skills assessment. Similar results have been found in case studies in a variety of Core Knowledge schools in Massachusetts, Washington, and Colorado.

## Implementation Assistance

- **Project Capacity:** Headquartered in Charlottesville, Virginia; prototype regional center at Trinity University in San Antonio, Texas; cadres of trainers in Texas, Florida, Maryland, Ohio, and Colorado.
- **Faculty Buy-In:** The school or school district must obtain the commitment of at least 80% of the teachers who will be involved in the implementation. Implementation requires full school participation for a minimum of three years. Teachers are expected to teach all of the topics in the Core Knowledge Sequence at the specified grade levels.
- **Initial Training:** Initial training consists of a three to five day (depending on district needs and resources) on-site intensive training for all teachers and administrators, spread over the first year of implementation. The training includes an overview of Core Knowledge, development of a schoolwide plan, advice on obtaining resources and parent involvement, and specific unit writing.
- **Follow-Up Coaching:** A variety of workshops, mentorships, and follow-up site visits are offered to help ensure successful implementation. Summer workshops are available focusing on integrating the Core Knowledge Sequence with local curricular guidelines,

collaborative planning, and lesson-writing sessions.

- **Networking:** Core Knowledge supports a Web site, publishes a quarterly newsletter, and hosts an annual national conference in March.
- **Implementation Review:** After receiving letters of commitment from the school demonstrating 80% support for the Core Knowledge Sequence, the school is recognized as a Core Knowledge school.

## Costs

Schools are required to commit to the implementation of Core Knowledge for a minimum of three years. The cost to implement Core Knowledge is determined by the number of staff members and students on a given campus. For a school with 25 teachers and 500 students, estimated costs would be \$36,000 for year one, \$32,000 for year two, and \$32,000 for year three. These fees cover the following services and materials:

- Leadership training for the principal and Core Knowledge coordinator (two days per year)
- Professional development training conducted by Core Knowledge consultants (five days per year)
- Site visits by Core Knowledge consultants (three two-day visits per year)
- School Kit
- Core Knowledge training materials for teachers (new materials each year)
- Core Knowledge curriculum tests for students

In addition to the estimated cost, the Core Knowledge Foundation expects a minimum of \$1,000 per teacher be allocated for Core Knowledge related materials.

## Student Populations

Core Knowledge was developed to serve all children. Core Knowledge programs currently serve disadvantaged students, Title I schools, minority students, and English-language learners. Core Knowledge schools are established in rural, suburban, and urban areas.

## Special Considerations

Teachers must be willing to implement the Core Knowledge Sequence for three years and to develop and implement a sequential program of skills instruction in the areas of reading and mathematics. The school must develop a schoolwide planning document that contains the Core Knowledge topics and district/state standards.

## Selected Evaluations

### Developer

Marshall, M. (1996). *Core Knowledge sequence credited in test score boosts*. Charlottesville, VA: Core Knowledge Foundation.

### Outside Researchers

Schubnell, G. (1996). Hawthorne Elementary School: The evaluator's perspective. *Journal of Education for Students Placed at Risk*, 1(1), 33-39.

Stringfield, S., & McHugh, B. (1997). *The Maryland Core Knowledge implementation: First year evaluation*. Baltimore: Johns Hopkins University, CRESPAR.

Stringfield, S., Datnow, A., & Nunnery, J. (1997). *First-year evaluation of the implementation of the Core Knowledge sequence: Qualitative report*. Baltimore: Johns Hopkins University, CRESPAR.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Virgil Grissom Elementary 4900 Sismbrook Houston, TX 77045 713-434-5662 Contact: Doris Bilton	900	large city	48%	0%	<1%	50%	1%	80%	0%	0%
S. L. Mason Elementary 1605 Azalea Drive Valdosta, GA 31602 912-333-8525 Contact: John Davis	588	large town	64%	0%	4%	0%	32%	64%	<1%	11%
Cale Elementary 1757 Avon Street Extended Charlottesville, VA 22902II 804-293-7455 Contact: Gerald Terre	540	rural	22%	0%	1%	2%	75%	40%	40%	12%
O. L. Slaton Junior High 1602 32nd Street Lubbock, TX 79405 806-866-1555 Contact: Robert Guerrero	830	mid-size city	9%	0%	1%	45%	45%	49%	0%	0%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

### For more information, contact:

Constance Jones  
Core Knowledge Foundation  
801 East High Street  
Charlottesville, VA 22902  
Phone: 804-977-7550  
Fax: 804-977-0021  
E-mail: [jonescore@aol.com](mailto:jonescore@aol.com)  
Web site: <http://www.coreknowledge.org>

## Different Ways of Knowing (K-8)

IN BRIEF	
Different Ways of Knowing (DWoK)	
<b>Founder</b>	Galef Institute
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1989
<b># Schools Served (5/1/01)</b>	600+
<b>Level</b>	K-8
<b>Primary Goal</b>	raise students' academic achievement and improve their attitudes toward school
<b>Main Features</b>	<ul style="list-style-type: none"><li>interdisciplinary arts-infused curriculum</li><li>development of multiple intelligences</li><li>promotion of collaborative learning and higher-order thinking</li><li>increase in independent research and engaged learning time</li></ul>
<b>Impact on Instruction</b>	interdisciplinary instruction; thematic, inquiry-based, arts-infused teaching strategies
<b>Impact on Organization/Staffing</b>	differentiated instruction; leadership training; support study group meetings
<b>Impact on Schedule</b>	time required for professional development workshops, collaborative planning and study
<b>Subject-Area Programs Provided by Developer</b>	yes (particularly social studies and history)
<b>Parental Involvement</b>	family cultures and community integrated into curriculum; parents included in orientations and workshops; family literacy support; partnerships with arts and community organizations
<b>Technology</b>	none required
<b>Materials</b>	provided by developer (including curriculum modules, teacher guides, children's literature, videotapes, software, and assessment resources)

### Origin/Scope

Founded in 1989 by Los Angeles philanthropists Andrew G. Galef and Bronya Pereira Galef, the Galef Institute is a nonprofit educational organization whose primary goal is comprehensive school reform. The Different Ways of Knowing four-year pilot included 500 classrooms in five states. Overall, the Institute's school reform efforts have served more than 600 schools.

### General Description

Different Ways of Knowing (DWoK) is a multi-year professional development program for teachers, administrators, and other stakeholders that provides an integrated approach to curriculum, instruction, assessment, and reporting. Recognizing that every child has talent and that children learn by doing, the DWoK curriculum provides clear and flexible guidelines for learner-centered classroom practice. Interdisciplinary, non-graded modules integrate social studies and history themes with mathematics, science, and the visual, performing, and media arts.

DWoK is a research-based and tested school reform initiative that attempts to engage and strengthen the linguistic, mathematical, artistic, and intuitive abilities of students in grades K-8. Specifically, it:

- Regards students as creative, capable learners and builds on their strengths
- Provides a framework for hands-on, student-centered learning that guides classroom teaching as well as continuous professional development
- Uses compelling themes to develop the multiple intelligences of children
- Provides the best in children's literature, reference materials, study prints, transparencies, audio- and videotapes, and software from various publishers

- Adapts instruction to include various symbol systems — not only language and numbers, but also the visual, performing, and media arts as learning tools
- Provides skill-building lessons in the context of inquiry-based learning
- Builds a classroom community, encourages shared responsibility for classroom management and learning, and promotes an understanding of democratic ideals
- Offers guidelines and resources to assess students' learning
- Invites active, collaborative reflection by both teachers and students
- Provides a common language for educators to use in creating an educational partnership among parents, school, district, and community

## Results

DWoK has been studied by different independent research teams in two large-scale implementation trials. A National Longitudinal Study, led by UCLA's James Catterall, followed 1,000 children in four school districts in Los Angeles and Boston over three years between 1991 and 1994. A second study integrated three separate research projects led by researchers at the University of Louisville and the University of Kentucky. It compared the implementation of 24 DWoK schools in Kentucky to non-DWoK schools statewide from 1993 to 1995. The studies used various measures and instruments including standardized test scores, state assessment results, student writing samples, student grades, surveys of students and teachers, and systematic classroom observations.

The UCLA researchers found a positive correlation between students' tests and their number of years in DWoK, including:

- significant gains in vocabulary, comprehension, and other measures of language arts (8 percentile points higher on standardized tests for each year of participation)
- higher student scores on written tests of social studies content knowledge and higher student grades by one-half grade point
- increased cognitive engagement and intrinsic interest in the humanities
- increased levels of achievement and motivation over time, as opposed to patterns of eroding motivation for non-DWoK students

The Universities of Louisville and Kentucky found:

- on the KIRIS statewide assessment of 4th grade students in 24 schools: 7% greater gains in reading and arts and humanities compared to schools statewide; 10% greater gains in social studies; 25% greater gains in math scores; and 7% greater gains in science over two years
- greater involvement of students in their classrooms and more interest in their schoolwork

## Implementation Assistance

- **Project Capacity:** The Galef Institute's Los Angeles and Kentucky offices support initial school and district planning and training. Each participating site is matched with an interdisciplinary team of coaches. Over time, this team identifies and trains a local team of coaches.
- **Faculty Buy-In:** The faculty of each participating school agrees to (1) engage in a multi-year partnership with DWoK; (2) allocate time for professional development; (3) integrate reform initiatives, curriculum programs, and family programs at the classroom level; (4) work to integrate the DWoK philosophy and practices into their reform plans;

(5) build an evaluation plan; (6) co-design a support structure and process for sustaining and spreading successful practices; and (7) designate school community and district DWoK advisory teams to work closely with the Galef Institute and participating schools.

- **Initial Training:** Professional development is designed in collaboration with the site in order to best meet local goals and needs. Each year a summer session is held for at least three days for teachers and administrators and is followed by three to four one-day professional development workshops conducted through the first year. Specialists, parents, and community members are included.
- **Follow-Up Coaching:** Schools receive monthly visits from a team of DWoK coaches, who are teacher leaders and artist educators. They observe in classrooms, offer feedback, give demonstration lessons, and facilitate group study meetings. Over time, this team trains a local team of coaches to build long-term internal capacity.
- **Networking:** The Institute works to create multiple pathways for large-scale participation of teachers, administrators, specialists, families, and community members in building school reform partnerships with districts or clusters of schools in various regions across the country. The Institute also supports networking of teachers, administrators, parents, and community members through national leadership conferences, the DWoKnet Web site, and the quarterly newsletter, *Teacher-to-Teacher*. Free e-mail access is offered to all teachers registered on the Web site.
- **Implementation Review:** Coaches and site facilitators support the ongoing assessment and review of DWoK implementation. The Institute works with schools and districts to tailor an evaluation and documentation plan to meet their needs. The plan is designed by James Catterall of UCLA to provide multiple views of student learning, instructional development, and institutional change.

## Costs

Costs are based on the partnership-building plan created with a given district or cluster of schools. The average cost is \$75,000 per school for each year of the three-year course of study. For school faculties above 20 there are additional costs for participation, depending on the size and level of involvement. Other expenses include release time for professional development (an average of three days in the summer and four days during the year) and costs to cover teachers' time for curriculum planning, support study groups, and on-site coaching sessions. Any desired independent evaluation, additional leadership training, preservice partnerships with local universities and colleges, and/or summer school program support would add to program costs.

The Institute works closely with schools and school systems to identify diverse funding sources and integrate public as well as private funding resources. Through technical assistance and the creation of practical, written tools, the Institute helps administrators identify and maximize the resources available to them for reform.

## Student Populations

DWoK is designed primarily for disadvantaged children and culturally and linguistically diverse school communities. DWoK has been implemented in Title I schools, urban schools, rural schools, and suburban schools.

## Special Considerations

The Galef Institute wishes to work with a group or cluster of schools (within a single district or multiple districts in a state) to encourage networking across school communities. When they consider building a partnership with a school, they work on multiple levels to develop relationships with the district leadership, state leadership, and community.

## Selected Evaluations

### Developer

Kentucky Department of Education and The Galef Institute-Kentucky Collaborative for Teaching and Learning.  
(1998). *Comparisons of schools receiving Title I funds and schools participating in Different Ways of Knowing: Analysis of KIRIS Data for Kentucky Elementary Schools*. Frankfort, KY: Author.

### Outside Researchers

Catterall, J. S. (1995). *Different Ways of Knowing. 1991-94 longitudinal study of program effects on students and teachers*. Los Angeles: UCLA.

Catterall, J. S., Dreyfus, J. P., & DeJarnette, K. G. (1995). *Different Ways of Knowing: 1994-95 evaluation report*. Los Angeles: UCLA.

Hovda, R., & Kyle, D. (1997). *Different Ways of Knowing: Effects on elementary teaching and learning practices*. Louisville, KY: University of Louisville.

Wong, K., & Sogin, D. (1997). *Different Ways of Knowing: Effects on elementary teaching and learning practices*. Lexington, KY: University of Kentucky.

## Sample Sites

Contact the Galef Institute first, and staff will connect you with these or other sites:

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./Alaskan	Asian Amer.	Hisp.	White			
Eastside Elementary 6743 E Avenue H Lancaster, CA 93535 661-946-2813 Contact: Alfonzo Gamino	600	mid-size city	14%	0%	0%	43%	39%	77%	35%	21%
Adairville Elementary (K-8) PO Box 277 Adairville, KY 42202 270-539-7711 Contact: Janet Hurt	380	rural	13%	0%	0%	1%	86%	40%	1%	20%
Jason Lee Elementary School 2222 NE 92nd Portland, OR 97220 503-916-6144 Contact: Chris Bodganow	400	large city	9%	2%	28%	0%	54%	60%	25%	3%
Roy P. Benavidez Elementary 6262 Gulfton Houston, TX 77081 713-778-3350 Contact: Diana De La Rosa	1350	large city	12%	0%	1%	86%	1%	94%	82%	5%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

## For more information, contact:

Sue Beauregard or Lin Shakir  
The Galef Institute  
5670 Wilshire Boulevard, 20th Floor  
Los Angeles, CA 90036

Phone: 323-525-0042  
Fax: 323-525-0408  
E-mail: [sue@galef.org](mailto:sue@galef.org) or [lshakir@galef.org](mailto:lshakir@galef.org)  
Web site: <http://www.dwoknet.galef.org/>

## Direct Instruction (K-6)

IN BRIEF	
Direct Instruction	
<b>Founder</b>	Siegfried Engelmann
<b>Current Service Provider</b>	National Institute for Direct Instruction
<b>Year Established</b>	1968
<b># Schools Served (5/1/01)</b>	300
<b>Level</b>	K-6
<b>Primary Goal</b>	improve academic performance so that by fifth grade, students are at least a year and a half beyond grade level
<b>Main Features</b>	<ul style="list-style-type: none"><li>• field tested reading, language arts, and math curricula</li><li>• highly scripted instructional strategies</li><li>• extensive training</li></ul>
<b>Impact on Instruction</b>	highly interactive lessons presented to small groups of students; flexible grouping of students by performance level; frequent assessment of student progress; no pull-out programs
<b>Impact on Organization/Staffing</b>	some teachers may be asked to serve as peer coaches
<b>Impact on Schedule</b>	to facilitate cross-class grouping, schools must coordinate schedules so that all teachers at a particular grade level teach major subjects at the same time
<b>Subject-Area Programs Provided by Developer</b>	yes
<b>Parental Involvement</b>	not emphasized
<b>Technology</b>	none required
<b>Materials</b>	detailed materials provided by publisher

### Origin/Scope

Direct Instruction has evolved from a theory of instruction developed by Siegfried Engelmann of the University of Oregon. Engelmann's early works focused on beginning reading, language, and math and were published by Science Research Associates in 1968 under the trade name DISTAR (Direct Instruction System for Teaching And Remediation). Over the past three decades, the original curricula have been revised and new ones developed through sixth grade (plus remedial programs and science programs for higher grades). These curricula have been incorporated into the comprehensive school reform model known as the Direct Instruction Model, which has been implemented in some 300 schools nationwide. Direct Instruction curricular materials have been used in hundreds more schools.

### General Description

Engelmann's theory of instruction is that learning can be greatly accelerated in any endeavor if instructional presentations are clear, rule out likely misinterpretations, and facilitate generalizations. He and his associates have developed over 50 instructional programs based on this theory. Each program is shaped through field tryouts; student errors are evaluated and lessons revised prior to publication. The lessons are carefully scripted and tightly sequenced.

The comprehensive Direct Instruction Model incorporates teacher development and organizational components needed to optimize use of these programs. Through substantial training and in-class coaching, teachers in the lower grades learn to present highly interactive lessons to small groups. Students make frequent oral responses, and teachers monitor and correct errors immediately. Students are placed at appropriate instructional levels based on performance, so those who learn rapidly are not held back and those who need additional assistance receive it. The model calls for inclusion of students with special needs except in the most extreme cases.

Although the Direct Instruction Model incorporates curricula for all areas, its reading, language arts, and math curricula can be implemented separately.

## Results

The instructional design components incorporated in Engelmann's theory of instruction have been the subject of numerous research studies over the past 30 years, beginning with Project Follow Through, a large-scale federal research project that funded and examined a variety of approaches to educating disadvantaged students. The Project Follow Through evaluation found that Direct Instruction was the most effective model in all three areas studied: basic skills (reading, language, math, spelling), cognitive skills, and affective behavior. Many other evaluations conducted since then also have found significant positive effects on student achievement in reading, language arts, or mathematics, as measured by a variety of standardized tests. Many of the program benefits appear to endure well past elementary school. Several studies have found that students who received Direct Instruction in grade school have higher high school test scores, graduation rates, and college acceptance rates.

## Implementation Assistance

- **Project Capacity:** National Institute for Direct Instruction in Eugene, Oregon (a non-profit corporation); JP Associates (which uses the same curricula with a somewhat different training approach) in New York; various independent trainers around the country.
- **Faculty Buy-In:** At least 80% of teachers must agree to follow the specifications of the program and to discontinue any programs that conflict with the Direct Instruction approach.
- **Initial Training:** Direct Instruction's comprehensive training program begins with a one-week pre-implementation session.
- **Follow-Up Coaching:** Implementation managers from the sponsoring contractor visit each school at least four days per month for on-site coaching, classroom observation, and modeling. Managers address problems teachers are having in the classroom, propose specific solutions, monitor progress, and help manage the grouping of students. The sponsor also identifies and trains teachers in schools to serve as peer coaches. Direct Instruction Training tends to follow a standard timetable. The first year, teachers are trained in diagnostic and instructional strategies, the schoolwide discipline program, and a single subject (usually reading) or pair of related subjects (e.g., reading/spelling). The second year, they are trained in the rest of the curriculum, with continued attention to diagnosis and instruction. The third year, as they master the procedures, they are introduced to more sophisticated techniques for dealing with particularly hard-to-teach students.
- **Networking:** Each year there are several regional Direct Instruction conferences. Additionally, the Association for Direct Instruction (a non-profit organization in Eugene, Oregon) publishes the journal *Effective School Practices*.
- **Implementation Review:** Student academic progress and teacher mastery of Direct Instruction techniques are carefully monitored.

## Costs

The cost of training services provided by a Direct Instruction provider for a school is usually \$65,000-\$75,000 per year for three to five years. Curricular materials, purchased separately from Science Research Associates, a division of McGraw-Hill, cost approximately \$200 per child the first year, \$150 per child the second year, and \$50 per child after that. Also,

schools must cover release time for teachers and coaches throughout the school year.

## Student Populations

Direct Instruction is most frequently adopted by poor-performing schools in high poverty areas.

## Special Considerations

Direct Instruction uses highly prescribed curricula and classroom procedures. Instruction is fast-paced and demands frequent interaction between teachers and students. During the first two years of implementation, coaches visit classrooms frequently. Developers estimate that schoolwide implementation of all curricular areas can take three years or more.

## Selected Evaluations

### Developer

Adams, G., & Engelmann, S. (1996). *Research on Direct Instruction: 20 years beyond DISTAR*. Seattle, WA: Educational Achievement Systems.

Engelmann, S., Becker, W. C., Carnine, D., & Gersten, R. (1988). The Direct Instruction Follow Through Model: Design and outcomes. *Education and Treatment of Children*, 11(4), 303-317.

Gersten, R., Keating, T., & Becker, W. (1988). The continued impact of the Direct Instruction Model: Longitudinal studies of Follow Through students. *Education and Treatment of Children*, 11(4), 318-327.

### Outside Researchers

Bereiter, C., & Kurland, M. (1981-82). A constructive look at Follow Through results. *Interchange*, 12, 1-22.

Stebbins, L. B., St. Pierre, R. G., Proper, E. C., Anderson, R. B., & Cerva, T. R. (1977). *Education as experimentation: A planned variation model*. Cambridge, MA: Abt Associates.

White, W. A. T. (1988). Meta-analysis of effects of Direct Instruction in special education. *Education and Treatment of Children*, 11(4), 364-374.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./Alaskan	Asian Amer.	Hisp.	White			
Gunnison Elementary 682 South Main Gunnison, UT 84634 435-528-7880 Contact: Elizabeth Jensen	545	rural	0%	1%	5%	3%	95%	56%	5%	16%
City Springs Elementary 100 South Caroline Street Baltimore, MD 21231 410-396-0610 Contact: Bernice Welchel	338	large city	98%	0%	1%	0%	1%	88%	M	M
Dickey Hill Elementary 5025 Dickey Hill Road Baltimore, MD 21207 410-396-0610 Contact: Jerome Butler	647	large city	99%	0%	0%	1%	1%	77%	M	M
Hampstead Hill 500 South Linwood Avenue Baltimore, MD 21224 410-396-9146 Contact: Sharman Rowe	542	large city	6%	6%	1%	3%	84%	71%	3%	8%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year. M = Missing data.

**For more information, contact:**

Kurt Engelmann  
National Institute for Direct Instruction  
PO Box 11248  
Eugene, OR 97440  
Phone: 877-485-1973 or 541-485-1973  
Fax: 541-683-7543  
E-mail: [kurt@nifdi.org](mailto:kurt@nifdi.org)  
Web site: <http://www.nifdi.org>

## Edison Schools (K-12)

IN BRIEF Edison Schools	
<b>Founder</b>	Chris Whittle and the Edison Project design team
<b>Current Service Provider</b>	Edison Schools Inc.
<b>Year Established</b>	1991
<b># Schools Served (Jan. 1998)</b>	25
<b>Level</b>	K-12
<b>Primary Goal</b>	to create innovative schools that operate at current public school spending levels and provide all students with an academically excellent education rooted in democratic values
<b>Main Features</b>	<ul style="list-style-type: none"><li>• contracts with school districts or charter schools</li><li>• schools within schools</li><li>• challenging curriculum (traditional and non-traditional approaches)</li><li>• instruction tailored to meet individual students' needs</li><li>• emphasis on computer technology</li></ul>
<b>Impact on Instruction</b>	Edison designs 75% of schools' curricula; schools use the Success for All reading program and the University of Chicago math program
<b>Impact on Organization/ Staffing</b>	Edison is responsible for implementing the educational programs and the management systems (this includes hiring staff)
<b>Impact on Schedule</b>	longer school day and year; Edison schools may use a different daily schedule than other district schools
<b>Subject-Area Programs Provided by Developer</b>	yes
<b>Parental Involvement</b>	Parent Advisory Board; families meet with teachers quarterly; social services provided on-site
<b>Technology</b>	Edison equips each school with technology, including a computer for every teacher and student
<b>Materials</b>	broad range of curriculum materials provided as part of the design

communities it serves for the performance of the schools. In Edison schools, authority must be as decentralized as possible, and each decision-making unit must be accountable for results.

Edison intends to enable high school graduates to perform college-level work. It also strives to foster in every student an appreciation of the arts, a commitment to health and fitness, an understanding of right and wrong, and a desire to participate responsibly in a democratic society.

The design is composed of ten integral parts:

1. *Schools Organized for Every Student's Success*: smaller schools within schools;
2. *Better Use of Time*: longer school day and year;
3. *Rich and Challenging Curriculum*: world class standards; education in humanities and

### Origin/Scope

The Edison Project (now Edison Schools) was founded by Chris Whittle in 1991. The first Edison partnership schools opened in summer 1995 in Kansas, Massachusetts, Michigan, and Texas. As of January 1998, Edison had 25 schools in eight states.

### General Description

Edison is a privately sponsored effort to create innovative schools that operate at current public-school spending levels and that provide all students, regardless of economic or social circumstances, with an education that is rooted in democratic values, that is academically excellent, and that prepares them for productive lives.

Edison establishes partnership schools either in contract with the local school district or as part of a charter school initiative. In the schools it contracts with, Edison is responsible for implementing the educational program, technology plans, and management systems. It is also accountable to the

arts, mathematics and science, ethics, practical skills, and health and fitness (Edison uses the University of Chicago School Mathematics Program and the Success for All reading program);

4. *Teaching Methods That Motivate*: multiple instruction techniques;
5. *Careful Assessment That Provides Real Accountability*: tied to standards; multiple assessment tools;
6. *A Professional Environment for Teachers*: a portable computer for every teacher; extensive professional development;
7. *Technology for an Information Age*: a computer in every student's home; highly equipped schools;
8. *New Partnership with Parents*: regular communication between teachers and parents;
9. *Schools Tailored to Your Community*: curriculum tailored to meet local needs; and
10. *Backed by a System That Serves*: support, guidance, and resources from the Edison national headquarters.

## Results

Early testing data from the first four schools show some positive results. After the 1995-96 school year Edison matched its schools with control schools and compared results. The tests, which were given or overseen by the Educational Testing Service, showed that elementary students at Edison schools in Kansas and Michigan showed substantial gains in reading. These studies also showed that students who began at an Edison school in kindergarten or first grade were consistently developing stronger reading skills than similar students locally. Reading results at the other two Edison schools were inconclusive. The Edison school in Massachusetts had no matching control group, although its students' reading performance was comparable to that of local schools and other Edison schools. The control group in Texas performed better than the Edison students, but the groups were not well matched.

The testing closely followed the evaluation program for the Success for All reading program, which Edison schools use. The reading tests included the Peabody Picture Vocabulary Test, the Durrell Oral Reading scale, and the Woodcock Reading Mastery Tests.

Other indicators show that parent and student satisfaction is high. Edison schools have a high rate of parent involvement; a 94% student attendance rate; and a student mobility rate below 10% annually. Edison schools are making strong progress toward implementing the design as measured against a detailed set of performance standards.

## Implementation Assistance

- **Project Capacity:** National headquarters located in New York and regional representatives in major geographical regions.
- **Faculty Buy-In:** Edison schools are schools of choice. Students and staff must choose to be there.
- **Initial Training:** Professional development begins shortly after contracts are signed for those teachers/principals that have already been recruited. It then intensifies during the summer before opening day with six weeks of preparation for all teachers.
- **Follow-up Coaching:** Ongoing professional development provided in the form of mentoring by colleagues, teaching by professional development specialists from Edison, peer tutoring by teachers at other partnership schools, and independent instruction from sources identified by teachers themselves.

- **Networking:** Online communications system, including a Web site, connects all members of the Edison national network of schools.
- **Implementation Review:** Edison ensures that its school design is faithfully implemented through a system of school performance standards and implementation guidelines designed to measure progress.

## Costs

School districts pay Edison Schools the same amount per pupil as they spend on other pupils in the district. For example, if the average per-pupil operating revenue in a district is \$5,000, Edison receives \$5,000 for each student who chooses to enroll in its schools (plus whatever Title I, special education, and other funding would normally flow to the school). Edison makes a considerable initial investment in each school to cover computers and other start-up costs.

## Student Populations

Edison is designed to meet individual needs, including those of students who are gifted and talented, students with disabilities, and those for whom English is a second language. Edison student populations closely mirror the demographics of the districts in which they are located.

## Special Considerations

Parents, teachers and communities must choose to have an Edison school work with their community. School districts and teacher unions must understand that Edison manages the school, including making scheduling, budgeting, and/or staffing decisions that may differ from those made at other public schools within the district.

## Selected Evaluations

### Developer

Edison Project. (1997). *Annual report on school performance*.  
New York: Author.

### Outside Researchers

External evaluations of Edison have been conducted by the Gordon S. Black Corporation and the Educational Testing Service. Information on findings from these studies are detailed in the *Annual Report on School Performance*.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Edison-Friendship Public Charter School-Champlain Campus (K-5) 1345 Potomac Avenue SE Washington, DC 20017 202-547-5800 Contact: John Pannell	903	large city	97%	0%	1%	1%	1%	91%	0%	8%
Wyatt-Edison Charter School 3020 Franklin Street Denver, CO 80205 303-292-5515 Contact: Karen LeFever	655	large city	44%	1%	1%	51%	5%	77%	14%	7%

Seven Hills Charter School 51 Gage Street Worcester, MA 01605 508-799-7500 Contact: Bob Martin	657	mid-size city	19%	1%	1%	29%	50%	54%	4%	10%
San Jose-Edison Academy 1500 East Francisquito Avenue West Covina, CA 91791 626-918-6575 Contact: Denise Patton	963	urban fringe of large city	9%	0%	17%	58%	16%	36%	6%	4%
Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.										

**For more information, contact:**

Gaynor McCown  
Edison Schools Inc.  
521 Fifth Avenue, 11th Floor  
New York, NY 10175  
Phone: 212-419-1600  
Fax: 212-419-1604  
E-mail: [geninfo@edisonschools.com](mailto:geninfo@edisonschools.com)  
Web site: <http://www.edisonschools.com>

# Expeditionary Learning Outward Bound (K-12)

IN BRIEF	
<b>Expeditionary Learning Outward Bound (ELOB)</b>	
<i>Founder</i>	Outward Bound, USA
<i>Current Service Provider</i>	Expeditionary Learning Outward Bound
<i>Year Established</i>	1992
<i># Schools Served (5/1/01)</i>	93
<i>Level</i>	K-12
<i>Primary Goal</i>	high achievement for all students
<i>Main Features</i>	<ul style="list-style-type: none"><li>challenging learning expeditions that involve authentic projects and fieldwork</li><li>high expectations for all students</li><li>shared decision-making</li><li>regular review of student achievement and level of implementation</li></ul>
<i>Impact on Instruction</i>	interdisciplinary projects; frequent journeys out of the classroom for fieldwork
<i>Impact on Organization/Staffing</i>	at least three hours of team planning time for teachers weekly; 15-20 days of professional development per teacher per year
<i>Impact on Schedule</i>	requires large, flexible blocks of time for in-depth investigation in school and in the field; students stay with same teacher for more than one year
<i>Subject-Area Programs Provided by Developer</i>	no
<i>Parental Involvement</i>	many opportunities for parents and community to be involved in students' learning expeditions
<i>Technology</i>	none required
<i>Materials</i>	provided

assessment is woven throughout each learning expedition, pushing students to higher levels of performance.

In Expeditionary Learning schools, teachers, students, and school leadership build a culture of high expectations for all students. Teachers work collaboratively in teams, with regular common planning time to plan interdisciplinary expeditions, critique each others' expedition plans, and reflect on student work and teacher practices to improve curriculum and instruction. To strengthen relationships in the classroom, students stay with the same teacher or team of teachers for more than one year. Teachers and school leadership participate in a sequence of professional development activities.

Schools assess their progress each year and use ELOB benchmarks to drive improvement.

## Origin/Scope

Formed in 1992, Expeditionary Learning Outward Bound (ELOB) is based on the principles of Outward Bound, which educator Kurt Hahn founded in 1941. There were 93 ELOB schools as of May 2001.

## General Description

Expeditionary Learning focuses teaching and learning toward enabling all students to meet rigorous academic standards and character goals. Curriculum, instruction, assessment, school culture, and school structures are organized around producing high quality student work in learning expeditions — long term, in-depth investigations of themes or topics that engage students in the classroom and in the wider world through authentic projects, fieldwork, and service.

Learning expeditions are designed with clear learning goals that are aligned with district and state standards. Ongoing

## Results

By the third year of implementation, 9 of 10 Expeditionary Learning schools have shown significant improvement in their students' scores on the standardized tests given in their districts. Some schools show improvement in the first year of implementation: A Portland, Maine, middle school, for example, increased its average score on the Maine Educational Assessment by 45 points in reading and 65 points in math — compared to statewide increases of 5 points in reading and 25 points in math. A Dubuque elementary school raised its average score from the 39th to the 80th percentile on the Iowa Test of Basic Skills.

ELOB also has resulted in higher levels of student engagement and motivation. Attendance at all Expeditionary Learning schools averages over 90%.

## Implementation Assistance

- **Project Capacity:** ELOB's main offices are in Cambridge, Massachusetts, and Garrison, New York, and staff are stationed on-site in nine states. There are 11 Outward Bound schools and centers, which serve as regional offices and training centers.
- **Faculty Buy-In:** At least 80% of the faculty and all of the school's leadership should endorse adoption of the design.
- **Initial Training:** A two-day leadership institute focuses school leadership on the structural and cultural components of the Expeditionary Learning design. The institute assesses the school's readiness to implement Expeditionary Learning and helps plan schedules, student groupings, teacher teams and related issues. This is followed by a five-day all-faculty institute in which teachers develop and plan learning expeditions.
- **Follow-Up Coaching:** ELOB provides at least 20 days of on-site technical assistance and professional development opportunities every year for the first three years to help teachers align their learning expeditions with state standards and adopt or adapt instructional tools and strategies compatible with the ELOB design. A five-day summer institute helps teachers plan learning expeditions. In addition, professional development events are scheduled throughout the school year.
- **Networking:** National leadership conference and a national conference for teachers; site visits and seminars at other ELOB schools; monthly newsletter and e-mail network.
- **Implementation Review:** ELOB national staff work with schools to conduct an annual self-review and a three-year Expeditionary Learning review by external reviewers. Expeditionary Learning benchmarks track the degree and quality of implementation.

## Costs

The annual costs of implementing ELOB vary according to the number of teachers in a school, the number of years the school has been implementing the design, the location of the school, and the number of other ELOB schools in the participating district or metropolitan area. Annual charges for working with a school with 25 teachers and 500 students in a district with two or three other ELOB schools are \$2,150 per teacher, or \$53,750.

For schools with more than 25 teachers, the fee remains \$2,150 per teacher for the first 25 (\$53,750) and decreases to \$1,150 per teacher thereafter. A school with 40 teachers in a district with two or three other ELOB schools would pay \$71,000. For schools with fewer than 25

teachers, subtract \$1,150 for each teacher under 25 from \$53,750. A school with 15 teachers would pay \$42,250.

These fees cover professional development, technical assistance, and materials. In addition, the school may need to spend \$1,000 to \$1,500 per teacher for stipends, substitutes, expedition supplies, and travel to national professional development activities.

## Student Population

ELOB serves all students, including disadvantaged students, minority students, and English language learners. The program has been implemented in Title 1 schools and primarily in urban areas.

## Special Considerations

Schools should provide for 15-20 days of professional development time for each teacher and budget for at least three hours of common team planning time per week.

## Selected Evaluations

### Developer

*Working towards excellence: Results from schools implementing New American Schools designs.* (1997). Arlington, VA: New American Schools.

### Outside Researchers

Bodilly, S., with Purnell, S., Ramsey, K., & Keith, S. J. (1996). *Lessons from New American Schools Development Corporation's demonstration phase.* Santa Monica, CA: RAND.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Rocky Mountain School of Expeditionary Learning 1700 South Holly Street Denver, CO 80222 303-759-2076 Contact: Robert Stein	320	large city	11%	1%	5%	10%	73%	1%	1%	13%
King Middle School 92 Deering Avenue Portland, ME 04102-2762 207-874-8140 Contact: Michael McCarthy	586	mid-size city	11%	1%	10%	3%	76%	51%	15%	18%
Rafael Hernandez Bilingual 61 School Street Roxbury, MA 02119 617-635-8187 Contact: Margarita Munoz	367	large city	21%	0%	0%	64%	15%	74%	M	M
Table Mound Elementary 100 Tower Drive Dubuque, IA 52003 319-588-8354 Contact: Kris Hall	372	mid-size city	1%	1%	1%	0%	98%	19%	0%	13%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year. M = Missing data.

**For more information, contact:**

Greg Farrell, President  
Expeditionary Learning Outward Bound  
100 Mystery Point Road  
Garrison, NY 10524  
Phone: 845-424-4000  
Fax: 845-424-4280  
E-mail: [greg\\_farrell@elob.org](mailto:greg_farrell@elob.org)  
Web site: <http://www.elob.org>

## High Schools That Work (9-12)

IN BRIEF	
High Schools That Work	
<b>Founder</b>	Southern Regional Education Board in Atlanta, Georgia
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1987
<b># Schools Served (5/1/01)</b>	Over 1,300
<b>Level</b>	9-12
<b>Primary Goal</b>	to increase the achievement of career-bound students by blending the content of traditional college prep studies with quality vocational and technical studies
<b>Main Features</b>	<ul style="list-style-type: none"><li>upgraded academic core</li><li>common planning time for teachers to integrate instruction</li><li>higher standards/expectations</li></ul>
<b>Impact on Instruction</b>	sites are expected to end low-level courses for all students and increase the use of engaging instructional strategies
<b>Impact on Organization/Staffing</b>	sites align with middle schools and postsecondary institutions; more teachers work together
<b>Impact on Schedule</b>	use of larger blocks of instructional time
<b>Subject-Area Programs Provided by Developer</b>	no
<b>Parental Involvement</b>	parents are expected to help their children select a schedule that reflects HSTW principles
<b>Technology</b>	no specific technology required
<b>Materials</b>	specific materials are suggested to guide schools in making changes

access to academic studies; a program of study that includes four years of English, three of math, and three of science; work-based learning; collaboration among academic and vocational teachers; students actively engaged; an individualized advising system; extra help; and keeping score (using assessment and evaluation data to foster continuous improvement). HSTW sets high expectations, identifies a recommended curriculum to meet the expectations, and sets student performance goals benchmarked to the National Assessment of Educational Progress (NAEP).

Three main ideas lay the foundation of HSTW: (1) academic and vocational teachers, principals, and counselors work together to establish unity of vision, a common process for reorganizing the school, and a plan for doing so; (2) teachers and school leaders are empowered to accomplish their goals when they share expertise and learn from each other; and (3) assessment, evaluation, and feedback should drive the process and implementation of reform. The HSTW framework builds support and collaboration among school and district leaders, teachers, students and families for raising expectations for a more challenging and meaningful high school program of study. SREB and its partners assist high schools in customizing the HSTW framework into action plans for creating more personalized learning environments

### Origin/Scope

High Schools That Work (HSTW) is an initiative of the Southern Regional Education Board (SREB)-State Vocational Education Consortium that began in 1987. More than 1,300 schools are members of the HSTW network.

### General Description

High Schools That Work is a whole-school, research- and assessment-based reform effort that offers a framework of goals and key practices for improving the academic, technical, and intellectual achievement of career-bound high school students. It provides intensive technical assistance, focused staff development, and a nationally recognized yardstick for measuring program effectiveness. HSTW promotes a changed school environment as a context for implementing 10 key practices: high expectations; challenging vocational studies; increasing

leading to improved student motivation and performance.

## Results

All sites are required to participate in the HSTW Assessment, which is based on the curriculum frameworks for the National Assessment of Educational Progress and involves achievement tests in reading, mathematics, and science of senior students about to complete a vocational or technical concentration. HSTW sites that participated in the assessment in 1994 and again in 1996 showed significant improvement in average reading and mathematics scores. The percentage of career-bound students meeting the HSTW performance goals increased from 33% in 1994 to 43% in 1996 in reading, and from 34% to 44% in mathematics. Furthermore, schools that were in the network longer showed more evidence of putting the key practices into place and had higher performance than did new sites.

Qualitative information collected through five case studies of improving sites, technical assistance visits, and annual progress reports suggests that when sites make progress in implementing the key practices, they tend to get the following results: improved achievement and higher attendance, graduation, retention, and postsecondary attendance rates. Likewise, dropout rates and discipline referrals tend to decline. High achieving schools in the top 25% of HSTW sites with diverse student populations show significant improvement in curriculum, instructional practices, and performance indicators. These high-performing schools most accurately reflect the school and classroom practices of HSTW.

## Implementation Assistance

- ***Project Capacity:*** HSTW has 21 member states, as well as many other sites nationwide that implement the program. Staff members provide HSTW services (technical assistance, staff development, and assessment) from SREB headquarters in Atlanta. Member states designate a coordinator for networks of HSTW sites and create technical assistance networks of HSTW experts within the state. In addition, each HSTW site has a designated coordinator for activities at the local level.
- ***Faculty Buy-In:*** In HSTW member states, sites must receive approval to join HSTW from the state department of education. Sites must also demonstrate that: (1) the majority of faculty are committed to supporting the HSTW framework; (2) they will conduct at least a five-year school improvement plan as detailed by the HSTW program; and (3) the school will participate in the HSTW assessment program. Sites in non-member states must also demonstrate that two thirds of the faculty are committed to supporting the HSTW framework.
- ***Initial Training:*** Training includes a two-day site development workshop (for sites in non-member states, the workshop is on-site for the whole faculty; for sites in member states, 7-10 member teams attend a statewide site development workshop); a four-day annual national HSTW conference; a national leadership forum for state policy-makers; a three-day retreat for system/school leaders; a three-day technical assistance leadership training for district and state leaders; and two weekend workshops topics such as integrated learning in support of the key practices. In member states, sites will work through state departments of education to contract with providers approved by the state and SREB for more intensive services.
- ***Follow-Up Coaching:*** In year one, sites receive at least two follow-up visits addressing the site action plan. SREB and state departments of education (in member states) will

broker customized technical assistance and training services. In year two, sites receive a three-day team technical assistance visit. In year three, sites receive assistance in using data to update their action plans and receive customized technical assistance and training.

- **Networking:** HSTW holds an annual national staff development conference, provides teleconferences that link developing schools with successful ones, and publishes a quarterly newsletter. Other publications aimed at increasing the effectiveness of HSTW sites are also available. General information is available on the SREB Web site.
- **Implementation Review:** SREB collects information from technical assistance visits, a biennial assessment, a teacher survey report, and annual progress reports submitted by schools.

## Costs

Three years of HSTW implementation costs \$25,000-\$35,000 per year. These costs include services such as a site development conference, planning, technical assistance visits, staff and curriculum development, training and resource materials, team conference registration, and the assessment package and an evaluative study. Other expenses include funds for stipends and substitute teachers, new kinds of curriculum materials, and travel expenses for state, regional or national training.

## Student Populations

HSTW targets all career-bound youth, but students at every level can benefit.

## Special Considerations

HSTW requires that sites work to replace the general track, raise graduation requirements, participate in the HSTW assessment program, develop a site action plan, and use assessment data to update their action plan.

## Selected Evaluations

### Developer

Emanuel, D., Joyner, N., Bradby, D. Greech, B., & Bottoms, G. (1997). *Working together to change practice and accelerate student learning*. Atlanta: Southern Regional Education Board; Berkeley, CA: MPR Associates.

Bottoms, G., & HSTW Staff. (1996). Case Studies: Hoke County High School (North Carolina); North Laurel High School (Kentucky); Sussex Technical High School (Delaware); Walhalla High School (South Carolina); Swansea High School (South Carolina). Atlanta: Southern Regional Education Board. Unpublished study.

Bottoms, G., & HSTW Staff. (1997). *High Schools That Work* (Research Brief Number 1 and Number 9). Atlanta: Southern Regional Education Board.

### Outside Researchers

Smith, T., Hayward, B., Powell, J., & Padillo, C. (1998). *Identification and assessment of integrated curricular approaches which promote school reform*. Washington, DC: Research Triangle Institute for the Office of Vocational and Adult Education, U.S. Department of Education.

Bottoms, G., & Mikos, P. (1995). *Seven most-improved high schools that work sites raise achievement in reading, mathematics and science*. Atlanta: Southern Regional Education Board.

Bradby, D. (1998). *Study of improving versus declining sites* (draft). Berkeley, CA: MPR Associates.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Loganville High School 3305 Georgia Hwy 78, SW Loganville, GA 30052 770-466-4892 Contact: Steve Miletto	1,137	urban fringe of large city	2%	0%	<1%	<1%	98%	5%	1%	10%
Los Fresnos High School PO Box 309 Los Fresnos, TX 78566-0309 956-233-3300 Contact:	1,824	urban fringe of mid- size city	<1%	<1%	<1%	91%	9%	74%	4%	16%
Daviess County High School 4255 New Hartford Road Owensboro, KY 42303-1802 270-684-5285 Contact: Brad Stanley	1,696	rural	1%	<1%	0%	<1%	99%	11%	0%	1%
Sussez Technical High School PO Box 351 Georgetown, DE 19947-0351 302-856-0961 Contact: Sandra Walls-Culotta	1,178	small town	23%	1%	1%	2%	74%	14%	<1%	12%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

### For more information, contact:

Scott Warren, Director of CSRD  
 Southern Regional Education Board  
 592 Tenth Street NW  
 Atlanta, GA 30318  
 Phone: 404-875-9211  
 Fax: 404-872-1477  
 E-mail: [scott.warren@sreb.org](mailto:scott.warren@sreb.org)  
 Web site: <http://www.sreb.org>

# High/Scope Primary Grades Approach to Education (K-3)

IN BRIEF High/Scope	
<b>Founder</b>	David P. Weikart
<b>Current Service Provider</b>	High/Scope Foundation
<b>Year Established</b>	1970
<b># Schools Served (5/1/01)</b>	100
<b>Level</b>	K-3
<b>Primary Goal</b>	to provide children with effective, developmentally sound learning experiences in all curriculum areas and to be sensitive to their backgrounds, strengths, and interests
<b>Main Features</b>	<ul style="list-style-type: none"> <li>• small group instruction</li> <li>• active learning</li> <li>• learning centers</li> <li>• observational and portfolio assessment</li> <li>• manipulative materials</li> <li>• technology integration</li> </ul>
<b>Impact on Instruction</b>	see Main Features
<b>Impact on Organization/ Staffing</b>	none
<b>Impact on Schedule</b>	none
<b>Subject-Area Programs Provided by Developer</b>	yes
<b>Parental Involvement</b>	program actively encourages parent and community involvement in workshops, classrooms, and other ways
<b>Technology</b>	4-6 computer stations and appropriate software (list provided) recommended for each classroom
<b>Materials</b>	teacher guides, video tapes, student assessment, CDs and records

guidelines for creating a classroom learning environment that includes designated activity areas furnished with materials, supplies, and equipment. The daily schedule provides children with opportunities to work with a variety of manipulative materials, formulate practical problems, and make thoughtful efforts to solve them.

A group of K-3 learning goals called *key experiences* is defined in the curriculum. The key experiences in language and literacy, mathematics, science, music, and movement provide a framework for sequenced instructional activities, daily teacher planning, and assessment of individuals and groups.

High/Scope views learning as a social experience involving reciprocal interactions between children and adults, and it offers children many experiences that require cooperative work and the use of effective communications skills.

## Origin/Scope

High/Scope Educational Research Foundation was founded in 1970 by David P. Weikart (then of Ypsilanti Public Schools) as a not-for-profit educational research, training, and program development organization. In its first year, High/Scope's K-3 program was active in 10 schools in six states. As of May 2001, more than 100 schools across the country had adopted the High/Scope elementary approach.

## General Description

Built on the principles and practices of active learning, the High/Scope approach to education encompasses all aspects of children's development and involves teachers and parents in supporting children's emerging intellectual, physical, social, and emotional skills and abilities.

The curriculum, which has its roots in High/Scope's validated preschool program, provides

The curriculum's plan-do-review process provides an organizational framework for children's work in the activity areas and allows children to generate learning initiatives. In the daily plan-do-review sequence, children choose, organize, and evaluate learning activities and share the results of their experiences with their peers. The child-initiated activities of the plan-do-review process provide teachers with insight into children's interests and levels of development while also helping children develop a sense of responsibility and empowerment that contributes to their lifelong competence and self-esteem.

## Results

In a study comparing achievement test scores of children in High/Scope classrooms at three elementary schools to children in non-High/Scope classrooms (a total of 3,073 children) over a three-year period (1988-91), researchers found significant advantages in favor of the High/Scope children. Out of a total of 40 composite score comparisons at the three sites over the three years of the study (including reading, language, mathematics, science, and social studies on the Comprehensive Test of Basic Skills, the Iowa Test of Basic Skills, and the California Achievement Tests), the High/Scope groups scored significantly higher on 22 and significantly lower on none.

Additionally, researchers from the Stanford Research Institute in Menlo Park, California, found higher levels of child initiative and goal-directed child activity in High/Scope than in non-High/Scope classrooms. For example, High/Scope children spent more time interacting with other children while engaged in individual or joint work.

## Implementation Assistance

- **Project Capacity:** High/Scope has 45 trainers who work on-site with teachers and administrators.
- **Faculty Buy-In:** High/Scope works in schools that are supportive of the model, but it does not require a formal vote by school staff.
- **Initial Training:** A one-week preservice training involving the entire school staff (parents also are invited to attend) provides a general overview of the program.
- **Follow-Up Coaching:** Staff training is accomplished through a series of on-site inservice training sessions over a three-year period. High/Scope trainers visit sites at least three times a year to conduct one-day workshops, observe classroom activities over several days, and present feedback to teachers.
- **Networking:** Several opportunities exist for networking including the annual High Scope Registry Conference held each spring, regional conferences, a High/Scope publication called *Resource* published three times a year, and a High/Scope Web site.
- **Implementation Review:** After each site visit, the field consultant or trainer writes a report using the High/Scope Elementary Program Implementation Profile. The report, which synthesizes classroom observations and recommended follow-up for individual teachers, is reviewed by the school and by High/Scope supervisors. Reviews are conducted no less than three times during the school year.

## Costs

Project cost is negotiated on an individual basis to account accurately for the number of classrooms in a project and travel costs associated with a particular site. However, a typical charge for a three-year, on-site inservice training contract for a school that contains eight K-3 classrooms would be as follows:

- consulting fee for 15 site visits over three school years: \$50,350
- curriculum guides and recordings for eight classrooms: \$4,800
- workshop materials: \$750
- registration fees for six local staff to attend High/Scope Registry Conference over three years: \$2,100
- estimated travel and subsistence costs for consultant: \$22,100

Overall, first-year costs typically total \$34,200, second-year costs \$22,950, and third-year costs \$22,950. The three-year total to implement High/Scope is \$80,100.

## Student Populations

High/Scope serves a broad spectrum of students from various socioeconomic backgrounds — from upper middle incomes to Indian reservations to urban environments. Many of the students in schools that implement the High/Scope approach qualify for Title I dollars. High/Scope also has experience working with bilingual students.

## Special Considerations

No special equipment or materials are required beyond computers and the developmentally appropriate manipulative and print materials that should be present in all good K-3 classrooms. However, classrooms must be rearranged into activity areas.

## Selected Evaluations

### Developer

Schweinhart, L. J. (1993). *Validation of the High/Scope K-3 Curriculum* (Proposal to the Program Effectiveness Panel, U.S. Office of Education). Ypsilanti, MI: High/Scope Foundation.

Schweinhart, L. J., & Wallgren, C. R. (1993). Effects of a Follow Through program on school achievement. *Journal of Research in Childhood Education*, 8, 43-56.

### Outside Researchers

*The Public School 92, Manhattan, Follow Through Program* (Submission to Joint Dissemination Review Panel). (1979). New York: Public School 92, Manhattan, Follow Through Program.

Stallings, J. A., & Kaskowits, D. H. (1974). *Follow Through classroom observation evaluation 1972-1973*. Menlo Park, CA: Stanford Research Institute.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Bessie Hoffman Elementary 50700 Willow Road Belleville MI 48111 734-484-3150 Contact: Marilyn Goodman	270	rural	15%	0%	2%	0%	83%	12%	0%	12%
Florence Elementary & Junior High PO Box 440 Florence, WI 54121 715-528-3262 Contact: Paul Bierman	427	rural	1%	6%	0%	23%	70%	23%	0%	9%
West Lincoln Elementary 5901 O Street Lincoln, NE 68510 402-436-1994 Contact: Cheri Bailey	456	mid- size city	7%	4%	3%	3%	83%	51%	<1%	23%
To'Hajiilee-He School PO Box 438 Canoncito, NM 87026 505-831-6426 Contact: Gene Johnson	378	rural	0%	100%	0%	0%	0%	100%	80%	20%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

### For more information, contact:

Gavin Haque  
 High/Scope Education Research  
 600 North River Street  
 Ypsilanti, MI 48198  
 Phone: 734-485-2000  
 Fax: 734-485-0704  
 E-mail: [gavinh@highscope.org](mailto:gavinh@highscope.org)  
 Web site: <http://www.highscope.org>

# Integrated Thematic Instruction (K-12)

IN BRIEF	
Integrated Thematic Instruction	
<b>Founder</b>	Susan Kovalik
<b>Current Service Provider</b>	Susan Kovalik & Associates, Inc.
<b>Year Established</b>	1982
<b># Schools Served (5/1/01)</b>	1,434
<b>Level</b>	K-12
<b>Primary Goal</b>	apply current brain research to teaching strategies and curriculum to develop responsible citizens
<b>Main Features</b>	<ul style="list-style-type: none"> <li>• based on current brain research</li> <li>• yearlong theme to integrate curriculum</li> <li>• enriched school and classroom environment</li> <li>• lifelong guidelines and LIFESKILLS</li> <li>• learning tied to locations and issues in the community</li> </ul>
<b>Impact on Instruction</b>	yearlong theme; cooperative learning; use of multiple intelligences
<b>Impact on Organization/Staffing</b>	strong emphasis on adult collaboration
<b>Impact on Schedule</b>	reduced pull-out programs; longer blocks of instructional time; time during the day for teams of adults to plan
<b>Subject-Area Programs Provided by Developer</b>	no
<b>Parental Involvement</b>	parent training; parents involved as speakers and site hosts
<b>Technology</b>	access to information via Internet and student access to desktop publishing desirable
<b>Materials</b>	full line of books and videotapes

## Origin/Scope

Integrated Thematic Instruction (ITI) was created in 1982 by Susan Kovalik and is continuously updated based on the most recent brain research. It is used in more than 1,400 schools (mostly elementary) in over half of the states and throughout the country of Slovakia.

## General Description

ITI is a model for applying current brain research to schools and classrooms to maximize student achievement and prepare responsible citizens. Schools create a "bodybrain-compatible" learning environment based on eight elements:

- 1. Absence of Threat:** Students are free from anxiety about their physical safety and experience a sense of well-being as they learn.
- 2. Meaningful Content:** Teachers select topics that address standards and engage students.
- 3. Choices:** Students have the

opportunity to select assignments that meet individual learning needs.

- 4. Adequate Time:** The schedule provides ample and flexible time for thorough exploration.
- 5. Enriched Environment:** The school offers an interesting and inviting setting, with emphasis on objects from the real world for students to see and touch.
- 6. Collaboration:** Students work together to enhance achievement and build social skills.
- 7. Immediate Feedback:** Students receive accurate feedback as they learn, not later.
- 8. Mastery at the Application Level:** Students internalize deeply what they learn and apply it to real-world situations.
- 9. Movement to Enhance Learning:** Movement activates and focuses bodybrain systems for learning.

In the classroom, teachers use instructional strategies based on the eight brain compatible elements. For example, they develop learning activities that address multiple intelligences (Choice), organize students in small groups instead of rows (Collaboration), and provide opportunities for students to create real products for real audiences (Mastery on the Application Level). Each teacher also develops an integrated curriculum organized around a yearlong theme.

The theme provides an overarching structure tied to an important concept that helps students see patterns and make connections among disparate facts and ideas.

To promote a productive learning environment and guide behavior, ITI schools establish five Lifelong Guidelines: trustworthiness, truthfulness, active listening, no putdowns, and personal best. Standards for doing one's best and achieving success in life are captured in the model's 17 LIFESKILLS, or personal traits such as integrity and initiative.

## Results

The CLASS program, a statewide program in Indiana based on the ITI model and implemented by ITI-trained educators, has been the subject of several studies. One study analyzed the performance of over 100 CLASS elementary schools on ISTEP (Indiana Statewide Testing for Educational Progress). The study reported that CLASS schools had higher ISTEP scores than other elementary schools in the state, and that scores at the CLASS schools had increased over time. A second study of 32 students who had attended the pilot CLASS school from kindergarten through fifth grade found that the ISTEP scores of this group of students was about one standard deviation above the mean in reading, language arts, and math. Another study gathered perception data on the impact of CLASS on student performance. The study reported that a majority of teachers believed CLASS was having a positive impact on student motivation and performance, particularly on higher-order thinking skills. All studies reported positive effects on student attendance or attitudes, school climate, and teacher morale and professionalism.

A 1998 doctoral dissertation compared the Texas Assessment of Academic Skills (TAAS) reading scores of students in an ITI elementary school with scores of students in a control school. Over a two-year period, ITI students' scores showed a 16% growth compared to a 3% growth at the control school.

Data from a number of other elementary schools also show a pattern of increasing student achievement after the implementation of ITI. For example, at a school in Texas, third grade TAAS reading scores rose from 39 to 79 over a three-year period, and third grade math scores rose from 19 to 71. Fourth and fifth grade scores showed similar increases.

Few data are available regarding the impact of ITI on middle or high school student achievement.

## Implementation Assistance

- **Project Capacity:** Implementation is supported by Susan Kovalik & Associates with 12 full-time trainers and 60-80 part-time trainers who provide beginning to advanced workshops over a three-to-five-year period. An array of print, audio, and video materials to support ITI implementation is available.
- **Faculty Buy-In:** Level of commitment is determined by the local site, but 80-90% of faculty is recommended.
- **Initial Training:** Keynotes and one-day workshops provide enough information for making an informed decision about ITI. Once a staff has committed, training begins with a three-day intensive workshop that prepares them to implement the first stage of the model. Initial training is followed by a model teaching week and focused "power packs" on such topics as integrating mathematics and other essential skill instruction.

- **Follow-Up Coaching:** Full-time trainers return to the school to provide coaching at least two times during the subsequent school year after each level of training. By the second or third year, the coaches train local educators who are having success with ITI to provide follow-up coaching internally.
- **Networking:** Susan Kovalik & Associates provides a variety of ways for people using ITI to stay in touch: Web page, listserv for e-mail dialogue, regional seminars, and five-day summer institutes. The organization has a list of ITI schools prepared to host visitors. Each spring some 200 of the most advanced practitioners gather by invitation to exchange ideas and receive updates on brain research and subsequent modifications to the ITI model.
- **Implementation Review:** The ITI Stages of Implementation, provided for classroom and schoolwide levels, are tools for self-assessment of progress and for setting goals.

## Costs

Formal ITI costs include:

- One-Day Overview ("What is ITI?"): \$2,500 plus expenses for one trainer
- Three-Day Intensive ("Bodybrain Basics"): \$7,500 plus expenses (one trainer) plus an ITI textbook (\$32.95) and a text on brain research (\$21.95) for each participant
- Coaching: \$725 per day plus expenses for one coach
- Model Teaching Week ("Bodybrain Basics in Action"): \$17,000 for two associates (up to 50 participants) or \$21,000 for three associates (required for secondary events)
- Topical Power Packs (wide variety of topics available): \$2,500 per day plus expenses (one trainer)

Typically the model teaching week occurs in the second or third year of implementation and is followed by power packs focused on specific topics selected by the school or district to address weak areas of understanding and application.

Schools using ITI find that there are some new needs that require realignment of the budget, reducing some expenditures while increasing others. Creating time during the day for teachers to collaborate and write curriculum is critical, especially during the first two years of implementation. Some schools address this need by creative use of substitute teachers. Depending on the school's starting point, there may be a need to purchase more non-fiction books and videos as well as supplies to support hands-on learning using real objects whenever possible while cutting back on copy paper and machine use. Initially there may be a need to purchase items to create an inviting classroom and school appearance.

## Student Populations

Schools in urban, suburban, and rural communities serving diverse student populations are using ITI. Because there is a strong emphasis on using multiple intelligences, and because an atmosphere of mutual respect is ensured, ESL students and those with other special learning needs often thrive in ITI classrooms. Students who find school learning to be easy are challenged to explore at deeper levels the topics that engage them.

## Special Considerations

Success implementing ITI requires strong support from school and district leaders, including the school board. Such support must go beyond the financial to an understanding of ITI and its implications for doing business throughout the organization. For best results, the whole organization makes a commitment to become a community of learners. Everyone understands that the reform effort will take three to five years to implement, so decision-makers avoid introducing other major initiatives during the implementation period. Also, old policies and procedures that contradict new practices are revised or eliminated.

## Selected Evaluations

### Developer

None published to date. An ethnographic study in preparation.

### Outside Researchers

Buechler, M. (1993). *Connecting Learning Assures Successful Students: A study of the CLASS program*. Bloomington, IN: Indiana Education Policy Center.

Grisham, D. L. (1995, April). *Integrating the curriculum: The case of an award-winning elementary school*. Paper presented at the annual meeting of the American Educational Research Association, Berkeley, CA.

Morgan, W. (1998). *The impact of CLASS on teaching and learning in Indiana*. Bloomington, IN: Indiana University.

Ruth, N. S. (1998). *A comparative study of Integrated Thematic Instruction (ITI) and non-integrated thematic instruction*. Doctoral dissertation, Texas A&M University.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./Alaskan	Asian Amer.	Hisp.	White			
Sul Ross Elementary School 501 South 7th Street Waco, TX 76706-1311 254-753-3541 Contact: Terri Patterson	350	mid-size city	22%	0%	0%	77%	4%	99%	53%	9%
Federal Elementary 27280 Powers Avenue Dearborn, MI 48125-1332 333-295-5790 Contact: Rick Prunty	240	urban fringe of mid-size city	14%	0%	0%	0%	86%	51%	5%	10%
Manatee Education Center (K-8) 1880 Manatee Road Naples, FL 34114-8340 941-417-4577 Contact: Santo Pino	550	rural	14%	0%	0%	56%	30%	80%	35%	25%
Fort Craig School (PreK-4) 520 South Washington Street Maryville, TN 37804-5804 865-983-4371 Contact: Pete Carter	300	urban fringe of mid-size city	1%	0%	0%	1%	98%	9%	0%	12%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

**For more information, contact:**

Jane McGeehan  
Susan Kovalik & Associates, Inc.  
17051 SE 272<sup>nd</sup> Street, Suite 17  
Covington, WA 98042  
Phone: 253-631-4400  
Fax: 253-631-7500  
E-mail: [skovalik@oz.net](mailto:skovalik@oz.net)  
Web site: <http://www.kovalik.com>

## MicroSociety® (K-8)

IN BRIEF <i>MicroSociety</i>	
<b>Founder</b>	George H. Richmond
<b>Current Service Provider</b>	MICROSOCIETY, Inc.
<b>Year Established</b>	1992 (organization established)
<b># Schools Served (5/1/01)</b>	200
<b>Level</b>	K-8
<b>Primary Goal</b>	preparing students to become active, caring, responsible citizens by multiplying opportunities for success
<b>Main Features</b>	<ul style="list-style-type: none"> <li>allows children to create a miniature society in the school</li> <li>adapts instruction to real world experience</li> <li>incorporates democratic ideals and entrepreneurship in a culturally sensitive community</li> <li>helps children develop positive attitudes toward learning, school, themselves, and their community</li> </ul>
<b>Impact on Instruction</b>	teachers can draw connections between academic skills, learning, and "Micro" activities
<b>Impact on Organization/ Staffing</b>	part- or full-time <i>MicroSociety</i> coordinator
<b>Impact on Schedule</b>	"Micro" typically runs three to five class periods per week
<b>Subject-Area Programs Provided by Developer</b>	interdisciplinary instructional materials help teachers connect subject areas to the <i>MicroSociety</i>
<b>Parental Involvement</b>	creates many opportunities for substantive parent and community involvement
<b>Technology</b>	none required, but high quality technology applications can be embedded in all aspects of the miniature society
<b>Materials</b>	training materials provided

K-8 students spend one class period each day at their jobs. They assume management or employee responsibilities in businesses, agencies, and nonprofits. In their work places, students apply technology, think critically about authentic crises, prepare and analyze budgets, resolve ethical issues, and develop cultural sensitivities. These experiences often raise profound issues such as the fairness of democracy, the rewards of entrepreneurship, cultural differences and similarities, the role of law in society, how to humanize institutions, and how much tax an individual should pay.

When fully implemented, the *MicroSociety* has six strands: technology, economy, academy, citizenship and government, humanities and arts, and heart (volunteerism and the ethical aspects of society). The *MicroSociety* also has 12 essential elements: an internal currency; a retail labor market; private property; public property; organizations such as ventures, agencies,

### Origin/Scope

George H. Richmond outlined the microsociety concept in his book *The Micro-Society School: A Real World in Miniature* (Harper & Row, 1973). The idea was first implemented schoolwide in 1981. Richmond founded the nonprofit MICROSOCIETY, Inc., in 1992 to provide support, materials, training, technical assistance, and networking for educators implementing *MicroSociety*. As of May 2001, the model had served over 200 schools.

### General Description

In the *MicroSociety* program, students collaborate with parents, community members, and teachers to build a miniature community in the school and establish a center of commerce and governance in which every child and adult participates. Children create and manage business ventures that produce goods and services. They also run agencies that handle governmental functions and lay the groundwork for organized accountability.

and nonprofits; agreement on a common purpose; definition of personal goals by teachers and students; meaningful contact with parents; meaningful contact with community partners; teacher planning time for the program; and a technology strand.

Where most schools rely on teachers to discipline children, *MicroSociety* promotes development of internal self-control. Children create a legislature that makes laws, develop a court system that administers them, and launch Crime-Stoppers, a group of students who enforce the laws. Because children are deeply involved in rule making and law enforcement, and want to avoid the expense and notoriety of litigation, disciplinary infractions decline. In *MicroSociety* schools, the peer group allies itself with law abiding interests rather than with outlaws.

The *MicroSociety* program results in improved student learning in several ways. First, it is integrated into the regular curriculum, making the basics more interesting and relevant to students. Second, it gives children opportunities to apply concepts learned in the classroom in real situations. Third, it rewards children for success in a broad array of intelligences, building self-esteem and motivation in those who might fail in traditional academic settings. Fourth, the program's flexibility allows educators to tailor it to local and state standards.

## Results

In 1998, an outside evaluator conducted a study of 15 schools in six states that began implementing the program in 1993 or 1994 and had two or three years of comparable, nationally normed post-intervention test data. Analysis of this data showed a 25 percent increase over baseline performance in math; 11 percent for language arts; and 7 percent for reading. When gains were compared to those of the district as a whole, *MicroSociety* schools on average outperformed the district in all three subject areas. Due to the small sample, however, results were statistically significant only in mathematics.

A 1997 developer survey of 29 *MicroSociety* schools found that most reported significant increases in test scores as well as increased attendance and reduced disciplinary infractions. Individual schools had significant results: Sageland Elementary (El Paso, TX) increased the number of students passing the state math standards by 52 percent, writing by 36 percent, and reading by 11 percent; West Middle (Sioux City, IA) increased average daily attendance from 74 percent to 98 percent and reduced disciplinary infractions from 6,234 to 1,802; Sherman Elementary (San Diego, CA) raised its district ranking from 126<sup>th</sup> out 156 schools to 37<sup>th</sup>.

## Implementation Assistance

- **Project Capacity:** National headquarters are in Philadelphia. Presently, MICROSOCIETY draws on an experienced pool of 25 certified trainers. Plans are in place to increase the number of trainers each summer.
- **Faculty Buy-In:** MICROSOCIETY requires a vote of 80 percent of the staff.
- **Initial Training:** MICROSOCIETY customizes professional development to take advantage of community resources and meet school goals. Certified trainers provide up to 20 days of technical assistance for planning and implementation, over a three-year period. Technical assistance is designed to facilitate experimentation, observation, reflection, and program modification by teachers, administrators, students, and partners. Program coordinators, administrators, parents, community partners, and students all have opportunities for training.
- **Follow-Up Coaching:** MICROSOCIETY trains site coordinators to observe both classrooms and *MicroSociety* program activities, while offering feedback to teachers.

Follow-up coaching is also provided by a certified trainer.

- **Networking:** The national headquarters facilitates networking by teachers, administrators, parents, and community members through a national quarterly newsletter, a Web site, e-mail, listserv, national/regional conferences, and Parent/Community Outreach Networks. Multisite Leadership Collaboratives, Teacher Support Networks, and Turn Around Trainers can help build capacity in a community and deepen the grassroots network.
- **Implementation Review:** Every registered *MicroSociety* school has a yearly accreditation review to gauge progress against benchmarks associated with *MicroSociety*'s 12 essential elements. Reviews are performed through telephone interviews and onsite visits.

## Costs

The standard training and support package costs \$45,000 for year one, \$35,000 for year two, and \$35,000 for year three, for a three-year total of \$115,000. This package includes:

- **Professional Development:** Three years of on-site training for school staff on all key aspects of the program are provided by two MICROSOCIETY Certified Trainers. Tailoring training to the school's needs, they take the staff through planning, piloting, and implementation and offer specialized training for the principal and coordinator.
- **Curriculum:** Instructional materials include manuals for teachers, workbooks for students, Testblasters (the *MicroSociety* balanced literacy program), and lesson plans and test preparation materials for standards integration.
- **Evaluation and Assessment:** Fees cover MICROSOCIETY Authentic Assessments, in-depth evaluation of program implementation (year two), and third-party evaluation of student impact (year three).
- **Networking Support:** Schools receive a subscription to MICROSOCIETY's newsletter and tuition for CSRD principals and coordinators for the Annual Summer Conference. Additional costs include support for the program coordinator; release time for teachers (30 hours in year one, 24 in year two, and 18 in year three); a one-time cost of \$7,000 for books and software for Testblasters; expenses for up to four teachers to attend the National Training Conference; and \$10-\$20 per student per year for agencies and ventures.

## Student Populations

*MicroSociety* has been implemented in urban, suburban, and rural schools. A majority of schools are Title I eligible.

## Special Considerations

A school must sign a letter of intent with MICROSOCIETY prior to proposal submission in which it:

- States that it has secured 80 percent affirmative vote of its staff
- Agrees to hire or assign an existing staff person to the role of *MicroSociety* coordinator
- Agrees to formulate a set of policies aimed at increasing parent and community participation in the society-building experience

## Selected Evaluations

### Developer

Richmond, G. (1989). The future school: Is Lowell pointing us toward a revolution in education? *Phi Delta Kappan*, 71(3), 232-236.

### Outside Researchers

Cherniss, C. (1997). *MicroSociety program implementation study*. Unpublished manuscript, Rutgers University, School of Applied and Professional Psychology, New Brunswick.

INOVA International Services Group. (1997). *Sageland MicroSociety organizational assessment survey summary*. Unpublished manuscript.

Kutzik, D. M. (1998). *MicroSociety program impact on standardized test performance*. Unpublished study, Drexel University, Philadelphia.

Ysleta Independent School District Office of Student Assessment. (1997). *Sageland Elementary End of the Year MicroSociety Student Survey*. Unpublished manuscript.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./Alaskan	Asian Amer.	Hisp.	White			
Sageland Elementary MicroSociety School 7901 Santa Monica Court El Paso, TX 79935 915-434-2900 Contact: Triana Olivas	582	large city	2%	<1%	0%	91%	4%	79%	36%	16%
Chocachatti Elementary Performing Arts MicroSociety Magnet 4135 California Street Brooksville, FL 34609 352-797-7067 Contact: Michael Tellone	697	urban fringe of large city	5%	0%	1%	4%	89%	39%	1%	13%
William Davison Elementary 2800 East Davison Street Detroit, MI 48212-1680 313-252-3118 Contact: Lorol Brackx	952	large city	77%	0%	21%	0%	2%	87%	21%	11%
Wilson Middle School 1800 Cottman Avenue Philadelphia, PA 19111 215-728-5015 Contact: Andrea Seitchik	1,263	large city	31%	0%	8%	8%	53%	43%	8%	13%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

## For more information, contact:

Katherine Primus  
Director of Business Development  
MICROSOCIETY  
13 South Third Street, Suite 500  
Philadelphia, PA 19106

Phone: 215-922-4006  
Fax: 215-922-3303  
E-mail: [kprimus@microsociety.com](mailto:kprimus@microsociety.com)  
Web site: <http://www.microsociety.org>

## Modern Red Schoolhouse (K-12)

IN BRIEF Modern Red Schoolhouse	
<b>Founder</b>	Hudson Institute
<b>Current Service Provider</b>	Modern Red Schoolhouse Institute
<b>Year Established</b>	1992
<b># Schools Served (5/1/01)</b>	110
<b>Level</b>	K-12
<b>Primary Goal</b>	to combine the rigor and values of little red schoolhouse with latest classroom innovations
<b>Main Features</b>	<ul style="list-style-type: none"><li>challenging curriculum</li><li>emphasis on character</li><li>integral role of technology</li><li>high standards for all</li><li>individual education compact for each student</li></ul>
<b>Impact on Instruction</b>	teachers vary time and teaching approaches to ensure that all students pass "watershed assessments" in order to advance from primary to intermediate to upper divisions
<b>Impact on Organization/ Staffing</b>	technology specialist must be added to the staff
<b>Impact on Schedule</b>	teachers may need to reschedule their day to accommodate interdisciplinary lessons and long-term projects
<b>Subject-Area Programs Provided by Developer</b>	yes
<b>Parental Involvement</b>	parents agree to help take responsibility for student performance through Individual Education Compacts; community helps define character development component
<b>Technology</b>	sophisticated computer technology is required
<b>Materials</b>	provided

will reach high academic standards. Mastery of subject matter is the only acceptable goal, regardless of a child's background, learning style, or pace. Because students learn at different rates and in different ways, instructional methodologies and time spent on lessons vary. This way, students progress through the curriculum in the ways that are best suited to their individual strengths and abilities.

MRSh strives to help all students achieve high standards through the construction of a standards-driven curriculum; traditional and performance-based assessments; effective organizational patterns and professional-development programs; and effective community-involvement strategies.

### Origin/Scope

Modern Red Schoolhouse (MRSh) was developed in 1992 by the Hudson Institute, a private, non-profit research organization. As of May 2001, there were 110 MRSh schools.

### General Description

MRSh works in partnership with schools throughout the country to reinvent the virtues of the little red schoolhouse in a modern context.

At an MRSh school, students master a rigorous curriculum, develop character, and promote the principles of democratic government. These elements of the traditional red schoolhouse are then combined with innovative teaching methodologies and student groupings, flexibility in organizing instruction and deploying resources, and advanced technology as a learning and instructional management tool.

The core principle of MRSh is that all students can and

The primary tool for monitoring continuing progress is the Individual Education Compact, an agreement negotiated by the students, parents, and teacher. This "educational road map" establishes measurable goals, details parent and teacher responsibility for helping the student achieve, and lists services the school, parents, or community should provide.

## Results

Across multiple sites, the test scores of students in Modern Red Schoolhouse elementary schools have increased. At Hansberry Elementary in the Bronx, for example, 52% of students passed New York's essential skills test in reading in 1995 and 82% passed in math, up from 22% and 47%, respectively, two years earlier. At Rozelle Creative and Performing Arts School in Memphis, all students met or exceeded 90% of the district median percentiles on the Tennessee Comprehensive Assessment Program (TCAP) in 1996. In addition, fourth grade writing proficiency scores improved by more than 100%. Average gains in the proportion of students meeting Texas minimum expectations for MRSchools in San Antonio were greater than district-wide average gains in 80% of the comparisons by grade (3, 4, 5) and subject (math, writing, reading) for 1996-97.

In a 1995 survey of all elementary teachers at MRSchools sites, the majority of teachers reported that the curriculum (90%), the design (66%), and the use of computers (90%) had a positive impact on student achievement, among other findings. Additionally, 100% of teachers reported that they are strongly satisfied with their role as professionals.

## Implementation Assistance

- **Project Capacity:** MRSchools has 12 full-time staff and 20 consultants. MRSchools will station a field manager on-site in any metropolitan area with eight schools engaged in full implementation. Otherwise, MRSchools relies on staff, senior consultants, and National Faculty (MRSchools trainers) who are based in the following states: Florida, Indiana, Massachusetts, New York, Pennsylvania, Texas, and Tennessee.
- **Faculty Buy-in:** At least 80% of staff must vote in favor of adopting the design.
- **Initial Training:** The first two years, MRSchools consultants are on-site approximately 30 days a year, including summer training. Basic training for all staff is approximately 5 days. Training for members of MRSchools task forces is 1 day; and leadership team training is 3 days per year.
- **Follow-Up Coaching:** In years two through four, MRSchools schools receive on-site technical assistance for 20 days per year in curriculum development and task force activities. In addition, MRSchools staff and consultants are always available via hotline, fax, and e-mail to all schools, all times. A full-time field manager is permanently on-site where there are eight or more schools in a metropolitan area. In the second and third years, National Faculty members are available locally.
- **Networking:** Annual administrator's conference, newsletter and other teacher oriented publications, and Web site.
- **Implementation Review:** To assess implementation, MRSchools conducts an annual survey of teachers and a biannual survey of students in fourth and eighth grades. In addition, MRSchools senior staff conduct site visits and review benchmarks with participating sites, and all training programs are routinely evaluated by participants.

## Costs

Costs depend on two factors: student enrollment and total staff (certified and non-certified). The average cost for program implementation in a school with approximately 30 certified staff is \$65,000 per year. Costs include training fees and materials. MRS Sh provides approximately 25 days of on-site professional development per year over a three-year period for individuals, small groups, grade level teams, and all staff, depending on the school's needs. The following costs are not part of MRS Sh implementation: hardware or software purchases; substitutes; staff stipends; and National Conference registration, travel, and lodging expenses.

## Student Populations

MRS Sh has served disadvantaged and minority students, as well as English-language learners. The design has been implemented in urban, rural and Title I schools.

## Special Considerations

None.

## Selected Evaluations

### Developer

*Working towards excellence: Results from schools implementing New American Schools designs.* (1997). Arlington, VA: New American Schools.

### Outside Researchers

Bodilly, S., with Purnell, S., Ramsey, K., & Keith, S. J. (1996). *Lessons from New American Schools Development Corporation's demonstration phase.* Santa Monica, CA: RAND.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./Alaskan	Asian Amer.	Hisp.	White			
Rozelle Elementary School 933 Roland Memphis, TN 38114 901-722-4612 Contact: Pamela Jackson	509	large city	99%	0%	0%	0%	1%	90%	0%	1%
Whittier Middle School 2101 Edison Drive San Antonio, TX 78201 210-735-7181 Contact: Nancy York	856	large city	1%	1%	1%	94%	5%	93%	8%	15%
Genisis Alternative High School 609 East Street Houma, LA 70363 504-876-1093 Contact: Laura Crochet	231	mid-size city	42%	7%	0%	1%	48%	57%	6%	35%
Rocky View Elementary School 345 Basilio Drive Gallup, NM 87301 505-722-3177 Contact: Marc Nestorick	365	small town	14%	70%	0%	13%	3%	100%	46%	9%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

**For more information, contact:**

Brian Spears  
Modern Red Schoolhouse Institute  
208 23rd Avenue North  
Nashville, TN 37203  
Phone: 888-275-6774 or 615-320-8804  
Fax: 615-320-5366  
E-mail: [bspears@mrsh.org](mailto:bspears@mrsh.org)  
Web site: <http://www.mrsh.org>

## Montessori (PreK-8)

IN BRIEF Montessori	
<b>Founder</b>	Maria Montessori
<b>Current Service Provider</b>	Montessori Public School Consortium and North American Montessori Teachers' Association
<b>Year Established</b>	1907
<b># Schools Served (Jan. 1998)</b>	3,000+
<b>Level</b>	PreK-8
<b>Primary Goal</b>	to help each child reach his or her fullest potential
<b>Main Features</b>	<ul style="list-style-type: none"><li>• multi-age groups</li><li>• self-correcting, manipulative learning materials</li><li>• open time and free choice of activity</li><li>• work matched to child's developmental level</li><li>• interdisciplinary curriculum</li><li>• learning driven by child's interest</li></ul>
<b>Impact on Instruction</b>	teachers learn and implement a comprehensive, integrated approach to child development and the psychology of learning
<b>Impact on Organization/ Staffing</b>	full-time program coordinator; paraprofessional classroom assistants
<b>Impact on Schedule</b>	morning and afternoon blocks of open, uninterrupted work time
<b>Subject-Area Programs Provided by Developer</b>	yes
<b>Parental Involvement</b>	orientations, discussions, open houses, observations, publications
<b>Technology</b>	none required
<b>Materials</b>	specialized learning materials replace textbooks, workbooks, and dittoes

12-14). Montessori in public schools is typically implemented as a "magnet" school option. In addition, there are 35 charter schools, and some federally-funded Head Start programs use Montessori as their educational component. Class numbers typically range from 25 to 30 students per teacher and paraprofessional.

The Montessori environment contains specially designed, manipulative "materials for development" that invite children to engage in learning activities of their own individual choice. Under the guidance of a trained teacher, children learn by making discoveries with the materials, thus cultivating concentration, motivation, self-discipline, and a love of learning. The curriculum is interdisciplinary and interactive.

In a Montessori classroom, independent activity constitutes about 80% of the work while teacher-directed activity accounts for the remaining 20%. The special environments also offer practical occasions for developing social relationships through free interaction. The materials themselves invite activity and are self-correcting. When a piece does not fit or is left over, the child easily perceives the error without any adult "correction." The child solves problems

### Origin/Scope

Montessori education was founded by Maria Montessori, who opened her first "children's house" (school) in 1907 in Rome. Today in the United States, there are more than 3,000 private Montessori schools and close to 200 public schools (including 35 charter schools) with Montessori-styled programs. The Association Montessori Internationale (AMI), founded by Maria Montessori in 1929, maintains Montessori educational principles and disseminates Montessori education throughout the world.

### General Description

Montessori is a comprehensive educational approach from birth through adolescence based on the observation of children's needs. It incorporates an understanding of children's natural learning tendencies as they unfold in "prepared environments" for multi-age groups (0-3, 3-6, 6-9, 9-12, and

independently, building self-confidence, analytical thinking, and the satisfaction that comes from accomplishment.

Parent involvement is encouraged through parent orientations, discussion groups, open houses, observations, and publications.

## Results

Montessori magnet schools have a track record of having accomplished the goals of desegregation, parental choice, and student achievement. They typically rank in the upper one-third of the schools in their district on achievement test scores, and they usually reflect the ethnic and racial makeup of their communities.

In a 1991 study by Carol Takacs, professor of educational psychology at Cleveland State University, graduates of the Montessori Head Start program at the Marotta Montessori Schools of Cleveland who had entered the Cleveland Public Schools were studied in relation to their public school peers. California Achievement Test reading scores for the Marotta graduates over three years averaged more than 12 percentage points higher than those of the total district population. Tim Duax (1989) studied the 1987 and 1988 graduates of a Milwaukee public-school Montessori program spanning ages 4 to 11. Duax asked 27 middle-school teachers in three middle schools to assess 15 randomly-selected Montessori graduates in comparison to peers in the same middle school with no Montessori background. The teachers gave the Montessori-prepared sample above-average ratings in relation to their peers on the following characteristics on the survey: using basic skills, following directions, turning in work on time, listening attentively, asking provocative questions, adapting to new situations, being responsible, showing enthusiasm for class topics, being individualistic, and exhibiting multicultural awareness.

## Implementation Assistance

- **Project Capacity:** Because the name "Montessori" is not copyrighted, there are many independent Montessori training programs, schools, and providers that share the Montessori philosophy and instructional approach but are not united under a common fiscal or organizational agency.
- **Faculty Buy-In:** No requirements.
- **Initial Training:** There are many independent Montessori teacher training programs with differing standards. The majority of public Montessori schools require the credentials of either the Association Montessori Internationale (AMI) or the American Montessori Society (AMS). AMI offers teacher training at 16 institutes around the United States and 18 abroad, in addition to on-site training contracts with public schools. AMS offers training at approximately 50 U.S. sites. AMI or AMS training typically lasts one full-time academic year.
- **Follow-up Coaching:** Many training programs offer follow-up visits and/or seminars for first-year teachers by training personnel. Many schools employ a full-time program coordinator who is experienced in Montessori education.
- **Networking:** Opportunities abound, notably through conferences and publications of AMI, AMS, and the North American Montessori Teachers' Association (NAMTA). There are a number of Web sites, listservs, conferences, and newsletters devoted to the Montessori philosophy.
- **Implementation Review:** AMI and AMS both offer school affiliation programs that include on-site consultation/review by experienced implementers.

## Costs

Training costs per teacher are approximately \$5,000-\$6,000. The costs of funding an ongoing Montessori program do not usually exceed costs associated with the operation of any other elementary school program, apart from the initial set-up costs as each age level is phased in. Each Montessori classroom has the following start-up costs and general maintenance expenses:

- Montessori materials: \$17,000-\$25,000
- Shelving, small tables, chairs: \$4,000-\$6,000
- Miscellaneous equipment and books: \$1,000-\$2,000
- Annual maintenance (consumables): \$800

## Student Populations

Montessori "magnet" schools typically serve racially and socio-economically diverse populations in large urban school districts. However, in its 90-year history, Montessori has been successfully implemented in urban, suburban, and rural settings, with all socio-economic levels, in a wide variety of cultures around the world.

## Special Considerations

Montessori materials are one of the philosophy's most important aspects. Many classrooms require the purchase and use of specially made Montessori materials. They should, however, be seen as textbook and workbook substitutes that will not have to be replaced, provided the teacher encourages their proper use.

## Selected Evaluations

### Developer

Duax, T. (1989). Preliminary report on the educational effectiveness of a Montessori school in the public sector. *The NAMTA Journal*, 14(2), 56-62.

Takacs, C. (1993). *Marotta Montessori Schools of Cleveland follow-up study of urban center pupils years 1991 and 1992*. Unpublished manuscript, Cleveland State University.

### Outside Researchers

Karnes, Merle, et al. (1978). *Immediate, short-term and long-range effects of five preschool programs for disadvantaged children*. Paper presented at the annual meeting of the American Educational Research Association, Toronto, Canada.

Karnes, M., Shwedel, A. & Williams, M. (1983). A comparison of five approaches for educating young children from low-income homes. In *As the twig is bent: Lasting effects of preschool programs* (pp. 163-169). Hillsdale, NJ: Lawrence Erlbaum Associates.

## Sample Sites

No sample site data available.

## For more information, contact:

David Kahn  
Montessori Public School Consortium and  
North American Montessori Teachers' Association (NAMTA)  
13693 Butternut Road  
Burton, OH 44021

Phone: 440-834-4011

Fax: 440-834-4016

E-mail: [davidjkahn@aol.com](mailto:davidjkahn@aol.com)

Web sites: <http://www.montessori-namta.org> (NAMTA)

<http://www.amshq.org/> (American Montessori Society)

<http://www.ami.edu> (Association Montessori Internationale)

## Onward to Excellence (K-12)

IN BRIEF	
Onward to Excellence	
<b>Founder</b>	Northwest Regional Educational Laboratory (NWREL)
<b>Current Service Provider</b>	NWREL
<b>Year Established</b>	1981
<b># Schools Served (9/1/01)</b>	over 1,000 (including 56 OTE II schools)
<b>Level</b>	K-12
<b>Primary Goal</b>	help schools build capacity through shared leadership for continuous improvement
<b>Main Features</b>	<ul style="list-style-type: none"><li>• school leadership teams</li><li>• two-year improvement process</li><li>• school profiles (data on student achievement)</li><li>• effective practices research</li><li>• curriculum mapping</li></ul>
<b>Impact on Instruction</b>	depends on decisions of leadership team and school community
<b>Impact on Organization/Staffing</b>	leadership team composed of principal, teachers, and (sometimes) parents, students, or district representatives
<b>Impact on Schedule</b>	depends on decisions of leadership team and school community
<b>Subject-Area Programs Provided by Developer</b>	no
<b>Parental Involvement</b>	parents often serve on leadership teams; input of parents and community members sought for key decisions
<b>Technology</b>	depends on decisions of leadership team and school community
<b>Materials</b>	materials provided to guide schools through the process (e.g., sample school profiles, research syntheses, and implementation guides for school leadership teams)

of the principal, selected school staff, community members, and students (secondary only) is formed to lead the school and community through the improvement process. An external study team (including representatives from other schools, the central office, local universities, and the community) is established to collect data and help monitor improvement. Finally, a facilitator is appointed at the school or district level to assure that the process moves forward.

The process itself consists of a series of workshops plus follow-up over a two-year period. Some of the workshops involve the school leadership or external study teams, and some involve the entire faculty. The workshops and assistance cover the following areas:

### Origin/Scope

Onward to Excellence (OTE) was developed at the Northwest Regional Educational Laboratory in the early 1980s. The model was piloted in 14 schools in three states between 1981 and 1984, then made available to schools across the country. Recently, certain aspects have been updated to incorporate new research on school improvement. Thus the model is now called OTE II. Overall, more than 1,000 schools participated in the original OTE process, and 56 schools have implemented OTE II since 1999.

### General Description

OTE II helps school communities work together to (a) set goals for student achievement, (b) use data to drive decision making, and (c) build capacity for continuous improvement. The model brings a broad base of research on effective practice into the school improvement process to maximize the potential for increases in student learning.

At each participating school, a school leadership team composed

- Awareness-building activities for the faculty, district leadership, and school board
- “Getting Started” activities to form teams and organize resources
- Introducing OTE II and a consensus decision-making process
- Creating a school profile of student achievement
- Establishing a student achievement goal based on the profile and community input
- Conducting a more in-depth school improvement assessment to supplement the profile
- Aligning and mapping the curriculum in the goal area to state standards and tests
- Using research to decide on best practices in the goal area (through faculty study groups)
- Assessing current practice in goal-related areas
- Developing an implementation plan for meeting the goal
- Monitoring progress toward the goal

The final step is to prepare new leaders and renew the process, ensuring that each school sustains continuous improvement on its own.

## Results

Selected OTE schools across the country have witnessed considerable improvements in student achievement. At an OTE elementary school in Washington state, for example, CTBS math scores for grades 2-5 increased over a five-year period from 52 to 75, and reading scores improved almost as much (Landis, 1997). And at an OTE high school, Functional Literacy Exam scores (a composite of reading, writing, and mathematics) increased over a three-year period from 795 to 818, leapfrogging both district and state scores (Landis, 1998). A study of 33 OTE schools in five Mississippi districts found that high implementation schools focusing on reading showed steady gains and outperformed comparison schools. However, the same study also found that high implementation is relatively infrequent and that achievement scores in OTE schools as a whole changed little over the course of the study (Kushman & Yap, 1997). A broader study of OTE schools in 37 Mississippi districts found that OTE schools in high poverty districts outgained non-OTE peer schools over a two-year period by a statistically significant margin on ITBS reading and language tests (Simmons, 1997).

An earlier study of OTE schools across the Northwest region found that OTE had a positive impact on roles and relationships in schools and districts, including more collegiality, better communication, increased staff involvement, shared leadership, and greater commitment. OTE also led to changed practices in schools and classrooms, and school staff members reported progress toward or achievement of their improvement goals. Actual progress as measured by student performance data was less positive than reported progress, however (Blum, Yap, & Butler, 1990).

## Implementation Assistance

- **Project Capacity:** OTE II headquarters are located at the Northwest Regional Educational Laboratory (NWREL) in Portland, Oregon. NWREL has established a network of five regional centers to develop more trainers and serve more schools in areas where interest in the model is high. The centers include the Appalachian Educational Laboratory (West Virginia), SERVE (Florida), the Western Regional Professional Development Center (Ohio), the Southeast Kansas Education Service Center, and WestEd (California).
- **Faculty Buy-In:** The local school board, superintendent, key central office staff, principals, school staff, and community must learn about the OTE II process and make a

commitment to full participation in training and implementation.

- **Initial Training:** The training program consists of 15 workshops spread over two years. The first workshop is for school and central office administrators, teacher leaders, community members, and representatives from the external study team. All subsequent workshops are for the school leadership team/facilitator, the external study team, or the whole faculty. Each workshop is between one and two days in length and focuses on specific aspects of the improvement process.
- **Follow-Up Coaching:** Coaching for the school leadership team and external study team follows each workshop and is done primarily by the school improvement facilitator. OTE II trainers provide coaching as needed to the facilitator.
- **Networking:** OTE II supports a Web site and hosts annual Trainer Update Workshops. Agencies providing OTE II training and assistance are encouraged to facilitate networking among school leadership teams, external study teams, and staff.
- **Implementation Review:** Collecting data about implementation is the responsibility of the external study team and the leadership team at each school. Data on implementation of the process and plans, positive changes in learning and teaching practices, and changes in student performance are collected and reviewed at least twice each year.

## Costs

When schools enter into a contract for OTE II, there is a basic fee of approximately \$21,500 for two years of training and technical assistance. The fee can vary slightly from region to region. Some regional centers (such as WestEd) charge more because of higher costs of doing business in their states. When multiple schools in the same district (up to four) are trained at the same time, a lower per-school fee is generally negotiated given that some of the workshops can be held with multiple teams. The basic fee does not include trainer travel costs, which are generally paid by the school on a cost-reimbursable or a fixed-fee basis.

Additional known costs include 0.25 FTE per school for a school improvement facilitator; release time for team members (usually eight days per year for between three and six teachers); and time for the full faculty to participate in improvement and professional development activities (at least six days). Other costs may include purchase of resource materials, instructional materials, and/or the services of content experts to lead professional development related to the improvement goal(s).

For more information on costs, including an electronic cost-estimate worksheet, please visit the OTE II Web site (URL listed below).

## State Standards and Accountability

OTE II includes two full days of training for all faculty in a process called Aligning and Mapping the Curriculum. Teachers examine their taught curriculum in a goal area (e.g., reading) against state standards and assessments, and learn how to repeat this process in other subject areas. This workshop is customized by state to ensure that teachers understand and apply state standards to their teaching practices as part of the comprehensive reform work.

## Special Populations/Focus

As part of the catalog Web site search mechanism, each model had an opportunity to apply to be highlighted for its efforts in serving selected student populations. The five categories were urban, rural, high poverty, English language learners, and special education. To qualify for

a category, a model had to demonstrate (a) that it included special training, materials, or components focusing on that student population, and (b) that it had been implemented in a substantial number of schools serving that population.

OTE II is highlighted in the rural category. The model serves rural schools in states across the Southeast and Northwest. Additionally, OTE II training is structured so that, in small districts with two to four schools, it can be delivered to all schools at once.

## Special Considerations

It is critical that schools identify and contract with experts who can provide training in the school improvement goal(s) area above and beyond the research synthesis materials and other resources provided by OTE II trainers.

## Selected Evaluations

### Developer/Implementer

Blum, R. E., Yap, K. O., & Butler, J. A. (1990). *Onward to Excellence impact study*. Portland, OR: Northwest Regional Educational Laboratory.

Kushman, J. W., & Yap, K. (1997). *Mississippi Onward to Excellence impact study: Final report*. Portland, OR: Northwest Regional Educational Laboratory.

Landis, S. (1997). *Snoqualmie Valley: There's a real buzz on around here about education*. Portland, OR: Northwest Regional Educational Laboratory.

Landis, S. (1998). *Bruce, Mississippi: The catalyst for change*. Portland, OR: Northwest Regional Educational Laboratory.

### Outside Researchers

Simmons, J. (1997). *Database analysis of Mississippi OTE schools: A summary of results to date*. Jackson, MS: Mississippi Department of Education.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./Alaskan	Asian Amer.	Hisp.	White			
Broadway High School 269 Gobbler Drive Broadway, VA 22815 540-896-7081 Contact: Steve Leaman	971	rural	0%	0%	0%	3%	96%	17%	4%	7%
Lonoke Elementary School 800 West Palm Street Lonoke, AR 72086 501-676-6740 Contact: Marilyn Hinson-Royal	405	urban fringe of mid-size city	22%	0%	0%	0%	77%	33%	1%	19%
Wescove Elementary School 1010 West Vine Avenue West Covina, CA 91790-3406 626-939-4870 Contact: Mike Chaix	468	urban fringe of large city	14%	2%	11%	60%	13%	63%	25%	3%
Lowndes Middle School 2379 Copeland Road Valdosta, GA 31601 912-245-2280 Contact: Samuel Clemons	1,080	large town	24%	0%	0%	2%	73%	46%	<1%	13%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

**For more information, contact:**

Robert E. Blum, Director  
School Improvement Program  
Northwest Regional Educational Laboratory  
101 SW Main Street, Suite 500  
Portland, Oregon 97204  
Phone: 503-275-9615  
Fax: 503-275-9621  
E-mail: [blumb@nwrel.org](mailto:blumb@nwrel.org)  
Web site: <http://www.nwrel.org/scpd/ote>

## Paideia (K-12)

IN BRIEF Paideia	
<b>Founder</b>	Mortimer Adler
<b>Current Service Provider</b>	National Paideia Center
<b>Year Established</b>	1984
<b># Schools Served (Jan. 1998)</b>	80+
<b>Level</b>	K-12
<b>Primary Goal</b>	preparing each student for earning a living, being a citizen of this country and the world, and pursuing life-long learning
<b>Main Features</b>	<ul style="list-style-type: none"><li>• Socratic seminars</li><li>• didactic instruction</li><li>• one-on-one coaching</li></ul>
<b>Impact on Instruction</b>	Socratic seminars require the greatest shift in instructional technique
<b>Impact on Organization/ Staffing</b>	half- or full-time facilitator
<b>Impact on Schedule</b>	requires flexible scheduling to accommodate Socratic seminars
<b>Subject-Area Programs Provided by Developer</b>	no
<b>Parental Involvement</b>	parents are encouraged to be involved in classes
<b>Technology</b>	used to aid individual instruction
<b>Materials</b>	developed by National Center and individual schools

achievement is expected of all students and that it is society's duty to provide that opportunity. A fundamental belief is that universal, high quality education is essential to democracy.

Instructional goals are based on acquisition of knowledge, development of intellectual skills, and enlarged understanding of ideas and values. These are addressed through three instructional approaches:

- **didactic instruction:** teacher lecturing which provides opportunities for "acquisition of knowledge";
- **coaching:** one-on-one instruction from the teacher, which takes place while students work independently at their own level and pace; and
- **small group seminars:** which usually use the Socratic method of questioning to explore issues in greater depth.

Schoolwide restructuring is necessary to fully implement all three instructional pieces, as Socratic seminars often require longer class periods (up to 2 hours), while coaching may call for smaller classes enabling teachers to spend more time with individuals. The National Paideia Center advocates schools' using locally developed standards. Schools are supported to align program goals and instructional practices to achieve local standards for students.

## Results

Evaluations of the Paideia model in several districts have included data on student achievement. For example, an evaluation comparing Paideia and non-Paideia students in two Chicago high schools found that Paideia students scored higher in reading comprehension, math problem-solving, science, and writing. From 1994 to 1996, the number of students from 12 Paideia schools in Guilford County (North Carolina) who passed the state's fourth-grade writing test increased by 27 percentage points, compared to a statewide increase of 17 percentage points. And at a middle school in North Carolina, writing test scores of eighth-grade students who had taken weekly Paideia seminars for three years showed a greater increase over that period than scores of eighth-graders statewide. Gains for minority students at the school were greater than gains for the class as a whole.

Seminar implementation also has been studied. The flexibility of the Paideia approach was perceived as both an "advantage and a hindrance" (Herman & Stringfield, p. 24) because teachers could depart from or alter the program, potentially diluting its effectiveness. Teachers in this same study reported that students improved in critical thinking and in their ability to express themselves clearly. Test scores at Paideia and non-Paideia schools in the study remained the same.

Further research is being planned. The Guilford County School Board recently commissioned a \$250,000 study to be completed over four years (1997-2001) by the School of Education of the University of North Carolina at Greensboro.

## Implementation Assistance

- **Project Capacity:** The National Paideia Center is focusing its efforts on schools where it can maximize its capacity to facilitate the growth of the Paideia Program. The NPC is looking to work with between 3 and 15 schools in one district or region for the 1998-99 school year, in addition to the existing Paideia schools.
- **Faculty Buy-in:** A yes vote by secret ballot of at least 80% of a school staff is one of the minimum requirements for implementation of the Paideia Program. (See Special Considerations for other requirements.)
- **Initial Training:** Representatives from the NPC provide 25-35 person days of on-site assistance for training and follow-up implementation visits. Usually four days of training are held prior to the beginning of the school year. Training efforts involve all teachers and administrators as well as parents from a school. Paideia facilitators provide on-site training in the Socratic method and support teachers in identifying and building resource materials.
- **Follow-Up Coaching:** NPC staff follow up the original training with monthly on-site technical support.
- **Networking:** A newsletter, use of e-mail, annual conferences, and the NPC Web site are main networking venues.
- **Implementation Review:** During implementation visits, NPC staff meet with the principal and facilitator, observing in classrooms and meeting with staff members. After each visit, a summary of observations, including next steps, is sent to the school.

## Costs

Costs for the Paideia Program are determined based on the size and location of the individual school and the number of schools collaborating in the training. Full implementation of the Paideia Program takes three years and is broken down as follows:

- Year 1 (Paideia Seminar): \$50-\$70,000
- Year 2 (Intellectual Coaching): \$40-\$50,000
- Year 3 (Assessment): \$30-\$40,000

These figures are based on a school with 35 faculty members. Costs may vary, however, and are calculated specifically to each school. Paideia also requires one full-time Paideia facilitator.

## Student Population

The Paideia Program has been successfully implemented in urban and rural schools serving all types of students.

## Special Considerations

The NPC is trying to ensure that schools go through a buy-in and adoption process and be accepted by the National Paideia Center *before* they apply for federal funding. The minimum requirements for implementing the Paideia Program are:

- An introductory presentation by a NPC representative
- A yes vote of 80% of staff in support of implementation
- Start-up costs for training and materials of approximately \$50-\$70,000 depending on school size
- Designation of one teacher as a full-time Paideia facilitator
- Commitment to a peer-coaching program to support implementation

The approach is designed to avoid a situation in which schools are approved for funding without an informed commitment from the necessary staff needed for high-quality implementation.

## Selected Evaluations

### Developer

Moore, J. (1990). *Alternative programs, an evaluation report*. Cincinnati, OH: Planning, Research and Evaluation Branch of the Cincinnati Public Schools.

### Outside Researchers

Herman, R., & Stringfield, S. (1997). *Ten promising programs for educating all children: Evidence of impact*. Arlington, VA: Educational Research Service.

Wallace, T. (1993). Chicago public schools: Evaluation of the 1987-88 Paideia program. In D. R. Waldrup, W. L. Marks, and N. Estes (Eds.), *Magnet school policy studies and evaluations* (p. 477-515). Houston: International Research Institute on Educational Choice.

Wheelock, A. (1994). Chattanooga's Paideia schools: A single track for all — and it's working. *Journal of Negro Education*, 63(1), 77-92.

## Sample Sites

No sample site data available.

**For more information, contact:**

Terry Roberts  
National Paideia Center  
University of North Carolina Greensboro  
PO Box 26171  
Greensboro, NC 27402  
Phone: 336-334-3831 or 336-334-3729  
Fax: 336-334-3739  
E-mail: tlrober3@uncg.edu  
Web site: <http://www.paideia.org>

## QuEST (K-12)

IN BRIEF QuEST	
<b>Founder</b>	Diane Rivers, Educational Concepts
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1990; revised 1996
<b># Schools Served (5/1/01)</b>	88
<b>Level</b>	K-12 (initial emphasis 6-8)
<b>Primary Goal</b>	to increase student achievement through quality process improvements
<b>Main Features</b>	<ul style="list-style-type: none"> <li>• total quality principles applied to schools and districts</li> <li>• standards-based processes</li> <li>• educational auditing</li> <li>• curriculum alignment</li> <li>• curriculum and instructional mapping</li> <li>• systemic assessment model</li> </ul>
<b>Impact on Instruction</b>	standards-based curriculum/instruction/assessment process in an interdisciplinary, team-based instructional design
<b>Impact on Organization/Staffing</b>	team-based teaching and learning; school improvement teams; leadership training
<b>Impact on Schedule</b>	professional development time; planning time
<b>Subject-Area Programs Provided by Developer</b>	no
<b>Parental Involvement</b>	parent satisfaction surveys; parent involvement teams; home-school linkages program (optional)
<b>Technology</b>	Internet access critical to successful implementation of Phase III
<b>Materials</b>	auditing templates and software; strategic planning software; school improvement templates; training materials; curriculum and instructional mapping software; Web site; server access

The model's design incorporates 3 phases, 7 quality principles, and 10 key processes. The 3 phases are:

**Phase I:** Quality Educational Audit that enables a school or district to analyze current performance, establish a baseline for strategic improvement purposes, and identify and implement quality processes for educational transformation.

**Phase II:** Strategic Quality Planning and Design that helps schools identify their mission and vision for the future, align educational practices with sound educational philosophy and research, identify key processes that drive the organization's performance, infuse quality principles and practices into those processes, and develop a set of aggressive, integrated strategies to ensure that the school's vision for the future becomes a reality.

### Origin/Scope

The Quality Educational Systems – Tools for Transformation (QuEST) model was developed by Diane Rivers, founder of a research, development, and consulting firm called Educational Concepts. Since 1990, QuEST has been used in efforts to improve educational environments by applying principles and processes of total quality management. As of May 2001, QuEST had been implemented in 88 schools.

### General Description

QuEST is a whole-school reform model that enables administrators, teachers, and students to create and sustain a high quality learning environment. The QuEST model is based on the belief that improvement occurs at the process level. Therefore, to improve schools, processes must first be addressed. Furthermore, when multiple processes are improved in an integrated fashion, significant school improvements can occur in less time than change theory typically suggests.

**Phase III:** Quality Development and Deployment that provides comprehensive training and development to administrators, teachers, and staff through a series of customized retreats, conferences, seminars, and workshops.

The seven quality principles that guide QuEST work are: (1) Mission-Driven Schools, (2) Total Quality Leadership, (3) Customer Focus, (4) Continuous Improvement of Processes, (5) Data-Driven Decision Making, (6) Continuous Learning Environments, and (7) Team Leadership/Team Membership.

The 10 key process areas that schools use to systematically assess performance are: (1) Philosophy, (2) Mission, (3) Organizational Structure, (4) Curriculum, (5) Instructional Strategies, (6) Assessment, (7) Professional Development, (8) Interdisciplinary Teaching, (9) Team Structure, and (10) Community Collaborations.

## Results

In 1994, the pilot school for the model, an inner-city middle school in Alabama, became the first school in the nation to receive the Quality Cup Award (presented by the Rochester Institute of Technology and *USA Today* to businesses or institutions that have witnessed dramatic improvements through the application of total quality principles). The school received the award as a result of significant increases in student achievement across an 18 month period. For example, language arts/reading scores increased by 21 percent for fifth graders, 31 percent for seventh graders, and 26 percent for eighth graders (as assessed by the Stanford Achievement Test, or SAT). Increases in other subject areas were evidenced as well.

Comparable results were found in a small rural middle school in Tennessee. There, fifth grade reading scores increased by 6 percentile points, language arts by 7 percentile points, social studies by 13 percentile points, and science by 26 percentile points from 1995 to 1997, based on Tennessee Comprehensive Assessment Program (T-CAP) scores. This school was the first school in the state to receive the Tennessee Quality Award from the governor.

Similarly, a small middle school in rural Michigan became the first school in that state to receive the Michigan Quality Leadership Award, based on significant improvements in math and writing scores on the Michigan Educational Assessment Program (MEAP).

A synthesis of evaluators' findings from these and other QuEST sites reveals the following:

- student achievement gains in language arts, mathematics, science, and social studies, as measured by standardized tests, including the SAT, T-CAP, and MEAP
- reduced number of student suspensions
- reduced number of student retentions
- improved curriculum implementation of national and state content standards
- increased levels of student, teacher, and parent satisfaction

## Implementation Assistance

- **Project Capacity:** Educational Concepts has its corporate office in Birmingham, Alabama. Diane Rivers serves as national director, overseeing all projects and developing additional products, services, and customer relations. Educational consultants coordinate northern and southern U.S. efforts and deliver services to participating districts. Ten consultants are currently trained in the QuEST model; plans are underway to expand the number of certified consultants to 50 (1 per state) over the next three years.

- **Faculty Buy-In:** Although no formal buy-in process is required, each school that has adopted QuEST has had buy-in or opt-out opportunities throughout each phase. Individual administrators and teachers within each school have the same options from phase to phase. Schools that have implemented the model have ranged from 98 to 100 percent participation rates.
- **Initial Training:** The initial work with faculty involves a “learning-by-assessing” design. Consultants are onsite up to 20 days for Phase I efforts (based on size of school and number of faculty). Phase II involves an additional 2 days of faculty time for planning. Phase III requires an additional 20 days of development and training based on specific needs identified and prioritized in the first two phases.
- **Follow-Up Coaching:** QuEST sites receive ongoing support and development in curriculum, instruction, technology, and assessment areas. Consultants spend up to 10 days in year two and 4 days in year three onsite. The model is designed to build internal capacity and systematically reduce the need for external support.
- **Networking:** QuEST sites are linked together through a network of internal and external consultants. Visits to other schools, e-mail, and Web site linkages bring schools together. Grade level chat rooms are being planned to connect teachers across the country.
- **Implementation Review:** Regularly scheduled site visits with administrators and teachers provide opportunities for consultants to assist sites with implementation issues. Additionally, the audit (assessment) tool is available to each school, and schools are encouraged to monitor their progress in each of the 10 key process areas.

## Costs

Schools are licensed to use the technology and materials that support the QuEST model. The cost for full implementation averages \$100,000 over a two-year period (\$40,000 for Phase I, \$20,000 for Phase II, and \$40,000 for Phase III). Additional support for Year 3 averages \$50,000 per school, depending on specific follow-up needs. These costs cover all consulting services for educational teams, licensing fees for all software, a Web-enabled access site, QuEST training materials, auditing tools, leadership training, teacher training and development, and three software tools (auditing software, planning software, and curriculum/instructional/assessment alignment tools). Optional software for student assessment is available for a one-time per school fee of \$12,500, plus set-up and installation costs. Schools also need to cover release time for teachers involved in professional development.

## Student Populations

QuEST was originally implemented to address the needs of urban middle-school students who were eligible for Title I. QuEST has been successfully implemented in urban, suburban, and rural schools serving Title I students, disadvantaged students, students with disabilities, and elementary and secondary students.

## Special Considerations

Ideally, an entire district (K-12) with multiple sites will elect to implement QuEST, thus enhancing the opportunity for sustained systemic reform.

## Selected Evaluations

### Developer

None available.

### Outside Researchers

No published documents available. The evaluations cited in the Results section were conducted by the following groups:

- National Quality Cup Award (RIT/USA Today): Senior Baldrige Examiners
- Tennessee Quality Award: Tennessee Board of Examiners
- Michigan Quality Leadership Award: Michigan Board of Examiners

## Sample Sites

Please contact Educational Concepts first to coordinate requests for information or site visitation.

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
North Dodge Elementary 301 Orphan Cemetery Road Eastman, GA 31023 912-374-6690 Contact: Wayman McCranie	862	small town	38%	0%	0%	1%	61%	67%	0%	12%
Surgoinsville Middle 1044 Main Street Rogersville, TN 37873 423-345-2252 Contact: Lowell Fairchild	306	urban fringe of mid-size city	8%	0%	0%	<1%	95%	43%	0%	10%
Montabella Middle 302 West Main Street Edmore, MI 48829 517-427-5414 Contact: Ron Farrell	277	rural	2%	0%	<1%	<1%	97%	41%	0%	10%
Emerson Elementary 515 East Oliver Street Owosso, MI 48867 517-725-7361 Contact: Linda Phaneuf	648	small town	12%	0%	0%	1%	87%	32%	1%	12%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

### For more information, contact:

Diane Rivers  
 Educational Concepts  
 4 Office Park Circle, Suite 315  
 Birmingham, AL 35223  
 Phone: 205-879-9160  
 Fax: 205-879-9161  
 E-mail: [sdrivers@aol.com](mailto:sdrivers@aol.com)  
 Web site: <http://www.ec-quest.com>

## Roots & Wings (PreK-6)

IN BRIEF Roots & Wings	
<b>Founder</b>	Robert Slavin, Nancy Madden, and a team of developers from Johns Hopkins University
<b>Current Service Provider</b>	Success for All Foundation
<b>Year Established</b>	1993
<b># Schools Served (6/1/01)</b>	1,800 schools use Success for All; 200 of these have added Roots & Wings components
<b>Level</b>	preK-6
<b>Primary Goal</b>	to ensure that all children learn to read, acquire basic skills in other subjects areas, and build problem solving and critical thinking skills
<b>Main Features</b>	<ul style="list-style-type: none"> <li>research-based curricula in four subjects</li> <li>integrated science and social studies program</li> <li>cooperative learning</li> <li>one-to-one tutoring</li> <li>family support team</li> </ul>
<b>Impact on Instruction</b>	prescribed curriculum in the areas of literacy, math, and social and scientific problem solving
<b>Impact on Organization/Staffing</b>	building advisory committee; full-time facilitator; family support team; one-to-one tutoring
<b>Impact on Schedule</b>	90-minute reading periods; 75 minutes daily for primary math, 60 for intermediate math
<b>Subject-Area Programs Provided by Developer</b>	yes (reading, math, science, social studies)
<b>Parental Involvement</b>	family support team works to increase school-home connections
<b>Technology</b>	none required
<b>Materials</b>	detailed curriculum materials, teachers manuals, and other materials provided for all core subjects

Roots & Wings builds on the Success for All program, initiated in 1987, which provides research-based curricula for students in reading, writing, and language arts; one-to-one tutoring for primary grade students struggling in reading; and extensive family support services (see description of Success for All). To these, Roots & Wings adds MathWings and WorldLab. MathWings is based on the National Council of Teachers of Mathematics (NCTM) standards, which emphasize problem solving, reasoning, real-world applications, and communication. Students work in mixed ability groups, progressing from concrete experience with manipulatives to a more abstract understanding of mathematical concepts. Many MathWings units use works of literature to help students explore concepts in meaningful contexts.

WorldLab is an integrated approach to social studies and science for grades one through five which emphasizes group simulations and investigations of real-world problems. For

### Origin/Scope

Roots & Wings, created in 1993 by Robert Slavin, Nancy Madden, and a team of developers at Johns Hopkins University, is a comprehensive, whole-school reform model designed to boost the basic skills achievement of all students while building problem solving skills, creativity, and critical thinking. As of June 2001, Success for All, the reading component of Roots & Wings, was operating in 1,800 schools. Some 200 of these schools have added the math, science, and/or social studies components that constitute Roots & Wings.

### General Description

The purpose of Roots & Wings is to create well-structured curricular and instructional approaches for all core academic subjects, prekindergarten to grade six, based on well-evaluated components and well-researched principles of instruction, assessment, classroom management, motivation, and professional development.

example, students pretend to be citizens of a town struggling with environmental issues. This simulation leads them to investigate real problems in their own communities. WorldLab is designed to build on knowledge and skills students are learning in language arts and mathematics classes. Physical education, music, and visual arts are used to enhance WorldLab simulations and investigations.

Each school has one full-time facilitator to help implement the program, a family support team to foster community and parent involvement, and a building advisory team to evaluate the entire school climate and advise the principal on general direction and goals.

## Results

Success for All, the reading/language arts component of Roots & Wings, has been evaluated extensively, with statistically significant positive results for program students compared to control students across many studies. (See the description of Success for All for more details.)

Research on the entire Roots & Wings model is neither as extensive nor as rigorous as that on Success for All. However, available data do show positive trends for selected Roots & Wings schools. Over the first three years of implementation (1993-96), the four pilot Roots & Wings schools in Maryland demonstrated substantially greater gains in third and fifth grade on the Maryland School Performance Assessment Program (MSPAP) in all six subjects tested (reading, writing, language, math, science, and social studies) than schools statewide. After implementation declined over the next two years (the result of reductions in funding and the resignation of a supportive superintendent), scores leveled off. Still, over the five year period, model schools showed greater gains than schools statewide on every measure except fifth-grade language (Slavin & Madden, 2000). Twelve other Roots & Wings schools in five other states have outgained schools statewide on state mathematics tests (Madden, Slavin, & Simons, 2000).

In a study of restructuring schools in Memphis, Tennessee, researchers reported that schools that adopted school reform models, including Roots & Wings, demonstrated greater gains on the Tennessee Value-Added Assessment System (TVAAS) than non-restructuring schools. Roots & Wings was one of two models overall that showed statistically significant effects compared to non-restructuring schools (Ross et al., 2001).

## Implementation Assistance

- **Project Capacity:** The Success for All Foundation, located in Baltimore, is the national headquarters for Roots & Wings. There are also 20 regional centers throughout the U.S. Overall, the foundation employs about 240 full-time trainers, including 180 reading trainers, 20 MathWings trainers, 5 WorldLab trainers, 20 family support trainers, and 15 middle school trainers. There are also 10 part-time trainers.
- **Faculty Buy-In:** At least 80% of a school's professional staff must vote on a secret ballot to adopt the program.
- **Initial Training:** For each component (Success for All, MathWings, and WorldLab), all teachers receive detailed manuals supplemented by three days of training at the beginning of the school year provided by Roots & Wings trainers. Schools often phase in the three components, starting with Success for All in year one, followed by MathWings in year two and WorldLab in year three.
- **Follow-up Coaching:** As noted in the Success for All description, trainers provide at least 26 person-days of on-site assistance over the first year of implementation for that

component. Follow-up support for the other components is comparable. Trainers make presentations, lead discussions, visit classrooms, and work with the building facilitator. The facilitator also organizes informal sessions to allow teachers to share problems, suggest changes, and discuss individual children.

- **Networking:** Conferences are held annually for principals and facilitators to network with those from other schools, receive program updates, and share problem-solving strategies. In many parts of the country, schools are joining forces with each other to create local support networks, and in some cases experienced schools are becoming mentors for new schools. Roots & Wings produces an annual newsletter for all its schools, and its Web site contains general program information and research articles.
- **Implementation Review:** As mentioned in the Success for All description, two trainers make three 2-day visits to assess the extent of implementation of that component. (These 12 person-days are part of the 26 for that component). Implementation visits continue at a lower level after the first year (8 person-days in year 2, and 6 person-days each year thereafter). The same review schedule holds for MathWings and WorldLab as these components are phased in. The review process involves interviewing staff, observing classes, examining data, and writing a summary of their findings. Trainers also use these opportunities to coach staff and consult with the facilitator.

## Costs

Sample costs for a school of 500 students (preK-5) typically range from \$75,000 to \$80,000 for each of three years, as reading, math, and social studies/science are phased in. These estimates include training, materials, and follow-up visits (including travel costs). Actual costs, which depend on school size, location, specific needs (such as bilingual, ESL, or year-round training), and number of schools collaborating in training, are calculated for individual schools. Schools also must cover the costs of a full-time facilitator and staff time for attending training sessions. Typically, the program is funded by reallocating a school's current Title I monies, often supplemented by other federal or state funds, such as CSRD funds.

## State Standards and Accountability

Roots & Wings curricula have been matched with state standards and assessments for almost all states. Further, modifications to the program have been made to match state standards, assessments, and response forms for many states. Documents showing the alignment of Success for All with state standards and assessments can be obtained from the Success for All Foundation.

## Special Populations/Focus

As part of the catalog Web site search mechanism, each model had an opportunity to apply to be highlighted for its efforts in serving selected student populations. The five categories were urban, rural, high poverty, English language learners, and special education. To qualify for a category, a model had to demonstrate (a) that it included special training, materials, or components focusing on that student population and (b) that it had been implemented in a substantial number of schools serving that population.

Roots & Wings is highlighted in all five categories. It has been implemented in many schools serving each population. The family support team and the promotion of links with social service organizations help support disadvantaged students and families. Provisions for distance

learning and joint service to multiple schools (with consequent fee reductions) facilitate implementation in rural schools. Success for All, the reading program, offers numerous components designed to address the needs of urban students, English Language Learners, and special education students. See the description of Success for All for more details.

## Special Considerations

Teachers must be willing to use detailed curricular materials. The inclusion of students with learning problems in regular classrooms is encouraged to the extent possible. Applications for a given school year must be filed before May 1 of the preceding school year.

## Selected Evaluations

### Developer

Madden, N. A., Slavin, R. E., & Simons, K. (2000). *MathWings: Effects on student performance* (Report No. 39). Baltimore: Johns Hopkins University, Center for Research on the Education of Students Placed at Risk. Slavin, R. E., & Madden, N. A. (2000). Roots & Wings: Effects of whole-school reform on student achievement. *Journal of Education for Students Placed At Risk*, 5(1&2), 109-136.

(See the Success for All description for additional research on that component of the design.)

### Outside Researchers

Bodilly, S., with Keltner, B., Purnell, S., Reichardt, R., & Schyler, G. (1998). *Lessons from New American Schools' scale-up phase*. Santa Monica, CA: RAND. Ross, S. M., Wang, L. W., Alberg, M., Sanders, W. L., Wright, S. P., & Stringfield, S. (2001, April). *Fourth-year achievement results on the Tennessee Value-Added Assessment System for restructuring schools in Memphis*. Paper presented at the annual meeting of the American Educational Research Association, Seattle.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Earl Warren Elementary 5420 Lowell Street Sacramento, CA 95820 916-382-5930 Contact: Betsy Inchausti	501	large city	11%	3%	34%	39%	12%	100%	49%	6%
Grasonville Elementary 5435 Main Street Grasonville, MD 21638 410-827-8070 Contact: Lawrence Dunn	383	rural	24%	0%	0%	0%	76%	26%	<1%	16%
Lackland City Elementary 101 Dumont San Antonio, TX 78236 210-678-2940 Contact: Jerry Allen	525	large city	7%	0%	0%	78%	14%	93%	11%	15%
Tyee Park Elementary 11920 Seminole Rd. Tacoma, WA 98499 253-589-7820 Contact: Tom Prentice	330	urban fringe of large city	25%	0%	0%	10%	50%	77%	11%	12%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

**For more information contact:**

Roots & Wings  
Success for All Foundation  
200 West Towsontown Boulevard  
Baltimore, MD 21204  
Phone: 800-548-4998  
Fax: 410-324-4444  
E-mail: [sfainfo@successforall.net](mailto:sfainfo@successforall.net)  
Web site: <http://www.successforall.net>

# School Development Program (K-12)

IN BRIEF	
School Development Program	
<b>Founder</b>	James Comer, Yale University
<b>Current Service Provider</b>	School Development Program National Center and various regional centers
<b>Year Established</b>	1968
<b># Schools Served (5/1/01)</b>	600
<b>Level</b>	K-12
<b>Primary Goal</b>	mobilize entire community of adult caretakers to support students' holistic development to bring about academic success
<b>Main Features</b>	<ul style="list-style-type: none"> <li>three teams (school planning and management team, student and staff support team, parent team)</li> <li>three operations (comprehensive school plan, staff development plan, monitoring and assessment)</li> <li>three guiding principles (no-fault, consensus, collaboration)</li> </ul>
<b>Impact on Instruction</b>	goals and outcomes are developed through the comprehensive school plan process
<b>Impact on Organization/ Staffing</b>	representative teams provide input into decision-making process; decisions made through collaboration and consensus
<b>Impact on Schedule</b>	depends on decisions of teams
<b>Subject-Area Programs Provided by Developer</b>	generally not, although a literacy program has been developed and piloted
<b>Parental Involvement</b>	parent team; parents serve on school planning and management team; in general, parental involvement is central to the program
<b>Technology</b>	depends on decisions of teams
<b>Materials</b>	training manual with materials; 14-segment video series

relations between school and home. Three mechanisms, three operations, and three principles guide the process:

## Mechanisms

- School Planning and Management Team: develops and monitors a Comprehensive School Plan; includes administrators, teachers, support staff, parents, and others.
- Student and Staff Support Team: helps improve the social climate of the school; includes social workers, counselors, special education teachers, and other staff with child development and mental health backgrounds.
- Parent Team: promotes parent involvement in all areas of school life.

## Operations

- Comprehensive School Plan: gives direction to the school improvement process; covers academics, school climate, staff development, public relations, and other areas.

## Origin/Scope

The School Development Program, founded by child psychiatrist James Comer of Yale University, was first implemented in 1968 in the two lowest achieving schools in New Haven, Connecticut. As of May 2001, over 600 elementary, middle, and high schools had used the program, also known as the Comer Process.

## General Description

Many children in inner city schools, Comer believes, come to school without the personal, social, and moral development necessary for academic success. To compound this problem, many school staff members, lacking adequate knowledge of child development and the children's home culture, are unprepared to deal appropriately with these students and their families.

Over a period of years, Comer developed a nine-part process to improve educators' understanding of child development and to foster healthier

- Staff Development Plan: focuses teacher training on needs related to the goals and priorities specified in the comprehensive plan.
- Monitoring and Assessment: generates data on implementation and results; allows teams to modify the school's approach where necessary.

### ***Guiding Principles***

- No-Fault Approach to Problem-Solving: lets teams analyze and solve problems without recrimination.
- Consensus Decision Making: promotes dialogue and common understanding.
- Collaboration: enables both the principal and the teams to have a say in the management of the school.

## **Results**

School Development Program researchers have conducted numerous studies of student achievement in Comer schools over the past 15 years. Some studies have compared student achievement in Comer schools to that in control schools. A 1985 study, for example, found that fourth and fifth grade students in Comer schools received significantly higher reading and math grades than students in control schools, and that third and fourth grade students in Comer schools scored significantly higher on CAT reading tests.

Other studies have compared student achievement in Comer schools to that for the district as a whole. In Prince George's County, Maryland, for example, average percentile gains on math, reading, and language arts CAT scores for the district's 10 Comer schools were significantly higher than the average percentile gains for district schools as a whole. Comer schools in Benton Harbor, Michigan, also witnessed considerable improvements in CAT scores over a four-year period, though district scores in some subjects in some grades improved as much as or more than scores in Comer schools. Several studies have found that student achievement improves more at schools that faithfully implement the Comer Process than at low implementation schools.

Finally, a number of studies have documented improvements in behavior, attendance, self-concept, and school climate in Comer schools.

## **Implementation Assistance**

- ***Project Capacity:*** National Center at Yale University; Regional Professional Development Centers in Chicago, Detroit, and Prince George's County (Maryland); partnerships with universities and urban school districts in Detroit, St. Louis, Topeka (Kansas), and New Orleans.
- ***Faculty Buy-In:*** No formal vote is required at schools. However, both the school and the district must make specific commitments to the program after an extensive "entry process" of discussion and examination. Additionally, the program now accepts new members only in districts that either already have or promise to have a sizable number of Comer schools.
- ***Initial Training:*** From each district, a designated district facilitator and principals from participating schools (and sometimes selected teachers and parents) attend a week-long workshop at Yale in May prior to the first year of implementation. The following February, they return for another week-long session. Yale also holds a Principals' Academy at the end of the first year of implementation.
- ***Follow-Up Coaching:*** Facilitators and principals are responsible for training school

staffs. They may be assisted upon request by members of the national or regional staffs.

- **Networking:** The School Development Program publishes a quarterly newsletter and supports a Web site. The program has also experimented with a variety of teleconferencing strategies, including satellite broadcasts and desktop video-conferencing.
- **Implementation Review:** School Development Program staff members visit member schools twice per year to assess the quality of implementation. Schools also complete a variety of checklists and questionnaires each year to document progress.

## Costs

The School Development Program contracts with districts for the participation of four or more schools. A contract has up to five components: the administration costs (\$5,000 for up to five schools per district, and \$1,000 for each additional school); the training tuition costs (\$1,000 per person per weeklong session); the consultation costs (\$1,200 per day of site visitation, plus expenses); the costs of optional instructional support programs (Balanced Curriculum, Essentials of Literacy, and Teachers Helping Teachers); and any additional service costs. Schools also must cover release time and travel expenses for trips to Yale and release time for on-site visits. Additionally, the program recommends that the district budget for a full-time program facilitator, although some districts have managed with half-time facilitators.

## Student Populations

The School Development Program was designed to meet the needs of inner city schools and students. Over the years, however, it has been implemented in a range of schools, including some suburban and rural schools.

## Special Considerations

The School Development Program focuses on building positive and productive relationships. Therefore its success depends on a substantial degree of collegiality and cooperation among teachers, principals, parents, and students. Until recently, program staff have assumed that decisions about curriculum and instruction would be made by teachers and others through participation on teams. Recently, the program has established a new unit to help schools more directly address curriculum alignment, literacy skills, and other curricular and instructional areas.

## Selected Evaluations

### Developer

Comer, J. P. (1988, November). Educating poor minority children. *Scientific American*, pp. 42-48.

Comer, J. P., Haynes, N. M., Hamilton-Lee, M., Boger, J. M., & Rollock, D. (1985). *Psychosocial and academic effects of an intervention program among minority school children*. New Haven, CT: Yale University Child Study Center.

Comer, J. P., Haynes, N. M., Hamilton-Lee, M., Boger, J. M., & Rollock, D. (1986). *Academic and affective gains from the School Development Program: A model for school improvement*. Paper presented at the annual meeting of the American Psychological Association, Washington, DC, August.

### Outside Researchers

Noblit, G., Malloy, C., Malloy, W., Villenas, S., Groves, P., Jennings, M., Patterson, J., & Rayle, J. (1997). *Scaling up a supportive environment: Case studies of successful Comer schools*. Chapel Hill, NC: University of North Carolina.

Stringfield, S., Millsap, M. A., Herman, R., Yoder, N., Brigham, N., Nesselfeldt, P., Schaffer, E., Karweit, N., Levin, M., & Stevens, R. (1997). *Urban and suburban/rural special strategies for educating disadvantaged children: Final report*. Washington, DC: U.S. Department of Education.

Wong, P. L., Oberman, I., Mintrop, H., & Gamson, D.

Haynes, N. M., & Emmons, C. L. (1997). *Comer School Development Program effects: A ten-year review, 1986-1996*. New Haven, CT: Yale University Child Study Center.

(1996). *Evaluation of the San Francisco Bay Area school reform portfolio: Summary report*. Stanford, CA: Stanford University.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./Alaskan	Asian Amer.	Hisp.	White			
Fort Foote Elementary (PreK-6) 611 Ager Road Suite 106 Hyattsville, MD 20126 301-408-7120 Contact: Sheila Jackson	512	urban fringe of large city	90%	0%	6%	0%	3%	40%	0%	0%
Gompers Elementary School (PreK-5) 1121 East McNichols Street Detroit, MI 48203 313-252-3081 Contact: Minnie Mayes	362	large city	93%	0%	0%	0%	7%	86%	0%	0%
John C. Haines Elementary School (PreK-8) 53 West Jackson Suite 950 Chicago, IL 60604-3664 312-435-3900 Contact: Vivian Loseth	695	large city	35%	0%	64%	0%	0%	96%	39%	0%
Charles R. Hadley Elementary School (K-5) 1500 Biscayne Blvd. Rm. 336 Miami, FL 33132 305-995-1975 Contact: Geneva Woodward	1,299	urban fringe of large city	1%	0%	1%	91%	7%	72%	41%	0%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

## For more information, contact:

Beverly Crowther, Research Associate  
School Development Program  
53 College Street  
New Haven, CT 06510  
Phone: 203-737-4008  
Fax: 203-737-4001  
E-mail: [beverly.crowther@yale.edu](mailto:beverly.crowther@yale.edu)  
Web site: <http://www.schooldevelopmentprogram.org>

## Success for All (PreK-8)

IN BRIEF	
Success for All	
<b>Founder</b>	Robert Slavin, Nancy Madden, and a team of developers from Johns Hopkins University
<b>Current Service Provider</b>	Success for All Foundation
<b>Year Established</b>	1987
<b># Schools Served (6/1/01)</b>	1,800
<b>Level</b>	preK-8
<b>Primary Goal</b>	ensuring that all children learn to read
<b>Main Features</b>	<ul style="list-style-type: none"><li>• schoolwide reading curriculum</li><li>• cooperative learning</li><li>• grouping by reading level (reviewed by assessment every 8 weeks)</li><li>• tutoring for students in need of extra assistance</li><li>• family support team</li></ul>
<b>Impact on Instruction</b>	in reading classes — prescribed curriculum, cooperative learning; other subjects not affected (see Roots & Wings for a description of other curricular components that can be added)
<b>Impact on Organization/Staffing</b>	building advisory committee; full-time facilitator; family support team; tutors
<b>Impact on Schedule</b>	daily 90-minute reading periods; tutoring
<b>Subject-Area Programs Provided by Developer</b>	yes (reading)
<b>Parental Involvement</b>	family support team works to increase parental involvement
<b>Technology</b>	none required
<b>Materials</b>	detailed curriculum materials, teachers manuals, and other materials provided

strategies for teaching reading, including shared story reading, listening comprehension, vocabulary building, sound blending exercises, and writing activities. Teachers are provided with detailed materials for use in the classroom. Students often work cooperatively, reading to each other and discussing story content and structure. From second through sixth grade, students use basals or novels (but not workbooks). All students are required to spend 20 minutes at home each evening reading books of their choice.

Students are grouped according to reading level for one 90-minute reading period per day. The rest of the day they are assigned to regular age-grouped classes. Every eight weeks, teachers assess student progress using formal measures of reading comprehension as well as observation and judgment. The assessments determine changes in the composition of the reading groups and help identify students in need of extra assistance. Those students receive one-on-one tutoring for 20 minutes per day at times other than regular reading or math periods. First graders get priority for tutoring. Tutors are generally certified teachers, though well-qualified paraprofessionals may tutor children with less severe reading problems.

### Origin/Scope

Success for All was founded by Robert Slavin, Nancy Madden, and a team of developers from Johns Hopkins University. It is now disseminated by the nonprofit Success for All Foundation in Baltimore, directed by the founders. The model was first implemented in an elementary school in Baltimore in 1987. The following year it expanded to 6 schools (5 in Baltimore and 1 in Philadelphia). By June 2001, it had grown to 1,800 schools.

### General Description

Success for All restructures elementary schools (usually high poverty Title I schools) to ensure that every child learns to read in the early grades. The idea is to prevent reading problems from appearing in the first place and to intervene swiftly and intensively if problems do appear.

Success for All prescribes specific curricula and instructional

Because parental involvement is considered essential to student success, each Success for All school forms a family support team, which encourages parents to read to their children, involves parents in school activities, and intervenes when problems at home interfere with a child's progress in school. The operation of Success for All is coordinated at each school by a full-time facilitator who helps plan the program and coach teachers. Finally, an advisory committee composed of the principal, facilitator, teacher and parent representatives, and family support staff meets regularly to review the progress of the program.

## Results

From the beginning there has been a strong focus in Success for All on research and evaluation. Numerous studies conducted by developers and others have compared scores on standardized reading tests (specifically, the Durrell Oral Reading Scale and several scales from the Woodcock Reading Mastery Test) for students in Success for All schools and control schools. For example, in one study (Madden et al., 1993), students at the first five Success for All schools outperformed students at control schools by statistically significant margins in every grade. By third grade, the advantage for Success for All students translated into a grade equivalent difference of more than eight months. For students in the lowest 25% of their cohorts, the effects were even greater. Several other studies (Dianda & Flaherty, 1995; Slavin & Madden, 1999a) have reported that English language learners in Success for All elementary schools outperform those in control schools.

Results have been similar for all but a handful of studies following the same research design. When the results of all these studies are combined (involving thousands of students), statistically significant positive effects are found for Success for All cohorts at every grade level. By fifth grade, Success for All cohorts score more than a year higher on reading measures than control groups (Slavin & Madden, 1999b).

According to a recent study (Borman & Hewes, 2000), these benefits for students appear to persist beyond participation in the program. Students who attended Success for All elementary schools outscored control students by a statistically significant margin on the eighth-grade.. CTBS/4 reading and mathematics tests and were less likely to be referred to special education during their middle school years.

The impact of Success for All has also been measured using statewide assessments. In Indiana, first and second grade students at two Success for All schools scored higher on the statewide ISTEP test than control students. There was little difference, however, in the scores of third graders on the test (Ross, Smith, & Casey, 1997). More recently, the performance of all 111 Success for All schools in Texas was compared to all other schools in Texas on TAAS, Texas's statewide assessment (Hurley, Chamberlain, Slavin, & Madden, 2000). TAAS reading scores for grades three, four, and five were averaged for all Success for All schools, which were divided into cohorts depending on the year of implementation. Gains for each cohort from the year prior to implementation to 1998 were compared to gains for the state as a whole over the same period. Each Success for All cohort outgained the statewide cohort by at least 4 percentage points. Overall, Success for All schools outgained other schools by 5.9 percentage points, a statistically significant difference.

Success for All recently developed a middle school model, but no evaluations of this model have been completed.

## Implementation Assistance

- **Project Capacity:** The Success for All Foundation, located in Baltimore, is the model's national headquarters. There are also 20 regional centers throughout the U.S. Overall, the foundation employs about 240 full-time trainers, including 180 reading trainers, 20 family support trainers, and 15 middle school trainers. The other 25 trainers focus on the mathematics, science, and social studies components of Roots & Wings. (See the description of Roots & Wings for more details.) There are also 10 part-time trainers.
- **Faculty Buy-In:** At least 80% of a school's professional staff must vote on a secret ballot to adopt the program.
- **Initial Training:** In the spring prior to implementation, the school's principal and designated building facilitator attend a week-long training session in their region. In August, project staff members visit the school for three days of intensive training for the full school staff, plus a fourth day for tutors.
- **Follow-Up Coaching:** Over the first year of implementation, trainers provide at least 26 person-days of on-site assistance to introduce new components of the program, coach teachers, and work with the building facilitator. Over time, the facilitator (a full-time position) assumes most of the coaching and problem-solving responsibilities.
- **Networking:** Success for All supports a Web site, publishes a newsletter, and hosts an annual national conference.
- **Implementation Review:** Three times during the first year, two trainers visit each school for two days to assess the extent of implementation. The trainers interview staff, observe classes, examine data, and write a summary of their findings. They also use these opportunities to coach staff and consult with the facilitator. (These 12 person-days are part of the 26 mentioned above.) Implementation visits continue at a lower level after the first year (8 person-days in year 2, and 6 person-days each year thereafter).

## Costs

Sample costs for a school of 500 students (preK-5) typically range from \$75,000 to \$80,000 for year one, \$30,000 to \$35,000 for year two, and \$23,000 to \$25,000 for year three. These estimates include training, materials, and follow-up visits (including travel costs). Actual costs, which depend on school size, location, specific needs (such as bilingual, ESL, or year-round training), and number of schools collaborating in training, are calculated for individual schools. Schools also must cover the costs of a full-time facilitator, staff time for attending training sessions, and travel expenses for the principal and facilitator to attend the spring training session. Typically, the program is funded by reallocating a school's current Title I monies, often supplemented by other federal or state funds, such as Comprehensive School Reform Demonstration (CSRD) or Reading Excellence Act funds.

## State Standards and Accountability

Success for All curricula have been matched with state standards and assessments for almost all states. Further, modifications to the program have been made to match state standards, assessments, and response forms for many states. Documents showing the alignment of Success for All with state standards/assessments can be obtained from the Success for All Foundation.

## Special Populations/Focus

As part of the catalog Web site search mechanism, each model had an opportunity to apply to be highlighted for its efforts in serving selected student populations. The five categories were urban, rural, high poverty, English language learners, and special education. To qualify for a category, a model had to demonstrate (a) that it included special training, materials, or components focusing on that student population and (b) that it had been implemented in a substantial number of schools serving that population.

Success for All is highlighted in all five categories. Although designed primarily for inner city schools serving large numbers of disadvantaged students, it has been implemented in many rural schools as well. It offers a number of features for students in each category:

- **Urban:** specific curricular materials, such as multicultural materials
- **High Poverty:** tutoring, family support team, and promotion of links with social service organizations
- **Rural:** provisions for distance learning and joint service to multiple schools (with consequent fee reductions)
- **English Language Learners:** *Éxito Para Todos*, a Spanish adaptation of the program for use in bilingual programs; additional materials (e.g., vocabulary guides and picture cards) and training in strategies (e.g., total physical response) that support English as a Second Language instruction through the sixth grade
- **Special Education:** a firm policy to keep students with reading problems out of special education, through grouping, tutoring, and other early intervention efforts (students who are identified as learning disabled are included in regular classrooms to the extent possible)

## Special Considerations

Reading teachers must be willing to use detailed Success for All materials. The inclusion of students with learning problems in regular classrooms is encouraged to the extent possible. Applications for a given school year must be filed before May 1 of the preceding school year.

## Selected Evaluations

### Developers/Implementers

Hurley, E., Chamberlain, A., Slavin, R. E., & Madden, N. A. (2001, June). Effects of Success for All on TAAS reading scores: A Texas statewide evaluation. *Phi Delta Kappan*, 750-756.

Madden, N. A., Slavin, R. E., Karweit, N. L., Dolan, L. J., & Wasik, B. A. (1993). Success for All: Longitudinal effects of a restructuring program for inner-city elementary schools. *American Educational Research Journal*, 30, 123-148.

Slavin, R. E., & Madden, N. (1999a). Effects of bilingual and English as a Second Language adaptations of Success for All on the reading achievement of students acquiring English. *Journal of Education for Students Placed At Risk*, 4(4), 393-416.

Slavin, R. E., & Madden, N. (1999b). *Success for All/Roots & Wings: Summary of research on achievement outcomes*. Baltimore: Johns Hopkins University, Center for Research on the Education of Students Placed at Risk.

### Outside Researchers

Borman, G. D., & Hewes, G. M. (2001). *The long-term effects and cost-effectiveness of Success for All*. Unpublished manuscript.

Dianda, M. R., & Flaherty, J. F. (1995, April). *Effects of Success for All on the reading achievement of first graders in California bilingual programs*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Ross, S. M., Smith, L. J., & Casey, J. P. (1997). Preventing early school failure: Impacts of Success for All on standardized test outcomes, minority group performance, and school effectiveness. *Journal of Education for Students Placed at Risk*, 2(1), 29-53.

Stringfield, S., Millsap, M. A., Herman, R., Yoder, N., Brigham, N., Nesselrodt, P., Schaffer, E., Karweit, N., Levin, M., & Stevens, R. (1997). *Urban and suburban/rural special strategies for educating disadvantaged children: Final report*. Washington, DC: U.S. Department of Education.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Park Avenue Elementary 100 Morton Street Yuba City, CA 95991 503-822-5265 Contact: Linda Cohee	629	mid-size city	3%	2%	6%	69%	20%	88%	36%	5%
Jupiter Elementary 950 Tupelo Road SW Palm Bay, FL 32908 407-952-5990 Contact: Lynn Spadaccini	800	rural	10%	3%	3%	10%	75%	50%	4%	24%
Otken Elementary 401 Montana Street McComb, MS 39648 601-684-3749 Contact: Rebecca Morgan	825	small town	82%	0%	0%	18%	0%	85%	0%	4%
Gordon Parks Academy 98 Greenwood Avenue East Orange, NJ 07017 Contact: Joyce Howard	430	urban fringe of large city	99%	0%	0%	0%	0%	97%	0%	13%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

Demonstration sites are available in many areas of the U.S. Contact the Success for All program for the nearest sites.

### For more information, contact:

Success For All Foundation  
200 West Towsontown Boulevard  
Baltimore, MD 21204  
Phone: 800-548-4998  
Fax: 410-324-4444  
E-mail: [sfainfo@successforall.net](mailto:sfainfo@successforall.net)  
Web site: <http://www.successforall.net>

## Talent Development High School With Career Academies (9-12)

IN BRIEF	
Talent Development High School	
<b>Founder</b>	Center for Research on the Education of Students Placed At Risk (CRESPAR), Johns Hopkins University and Howard University
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1995
<b># Schools Served (5/1/01)</b>	35
<b>Level</b>	9-12
<b>Primary Goal</b>	improve achievement and other outcomes for at-risk students in large high schools
<b>Main Features</b>	<ul style="list-style-type: none"><li>• ninth-grade success academy</li><li>• career academies for grades 10-12</li><li>• core curriculum in a four-period day</li><li>• twilight school</li></ul>
<b>Impact on Instruction</b>	high level core curriculum prepares all students for college attendance; four-period day allows in-depth instruction and project learning
<b>Impact on Organization/ Staffing</b>	ninth-grade success academy and career academies are distinct small schools with their own faculty and management
<b>Impact on Schedule</b>	four-period day
<b>Subject-Area Programs Provided by Developer</b>	no
<b>Parental Involvement</b>	incorporates the Epstein six-fold parent/school partnership approach
<b>Technology</b>	integrated into curricular areas
<b>Materials</b>	supporting materials provided

### Origin/Scope

At the invitation of the Maryland State Department of Education, Patterson High School in Baltimore — one of two high schools eligible for state takeover — and the Center for Students Placed At Risk at Johns Hopkins University worked together to develop reforms to turn the school around. The first-phase Talent Development Model with Career Academies (TDHS) was implemented in 1995-96. As of May 2001, 34 other schools had implemented the model as well.

### General Description

The Talent Development High School with Career Academies is a comprehensive multi-phased reform model for large high schools that have serious problems with student attendance, discipline, achievement scores, and dropout rates. Among its components:

- **Ninth Grade Success Academy:** A separate transitional program places groups of 150-180 first-year students with interdisciplinary teams of four to five teachers who share a block schedule with common planning time. This program has its own faculty, its own management team, and its own part of the building with a clearly labeled entrance.
- **Career Academies for the Upper Grades:** Several self-contained Career Academies are formed in the upper grades, each enrolling 250-350 students. Each academy offers the same common core of academic courses with an appropriate blend of career applications to match the particular academy theme, so college entrance as well as entry to work is possible from each academy. Like the ninth grade academy, each career academy has its own faculty, management team, section of the building, and entrance. Depending on their size, schools can have from two to six academies.
- **Core Curriculum in a Four-Period Day:** A basic set of academic courses is required for all students. The ninth grade curriculum features double time in mathematics and English

for students who have weak prior preparations. Summer school, Saturday school, and after-hours credit school are offered so students can recover from course failures.

- ***Twilight School:*** An alternative after-hours program is conducted in the building for students who have serious attendance or discipline problems or who are coming to the school from prison or suspension from another school. Instruction is offered in small classes in the basic subjects, and extensive services are provided by guidance and support staff.

## Results

Implementation and results have been evaluated at Patterson High School (the first TDHS school). In 1996-97 (the second year of implementation), the portion of students passing the mathematics portion of the State Functional Exams increased by 20 percentage points (36% to 56%) over the previous year's scores. The increase in writing scores was 12 percentage points (45% to 57%). These scores gave Patterson the highest pass rate in mathematics and the third highest pass rate in writing among Baltimore's nine neighborhood high schools. Reading scores dropped slightly, from 87% to 85%.

Additionally, Patterson witnessed significant improvements in student attendance and promotion rates. Patterson made its greatest strides in increasing the numbers of ninth-graders who earned promotion to the tenth grade.

After implementation, teacher concerns about tardiness, absenteeism, fights, vandalism, student apathy, drug use, and abuse of teachers all decreased dramatically at Patterson but not at a comparison school. Most teachers and students believed their school climate was better.

## Implementation Assistance

- ***Project Capacity:*** Implementation teams are available from Johns Hopkins and Howard Universities. Two regional laboratories (WestEd and NCREL) have taken initial steps to provide implementation assistance in their regions.
- ***Faculty Buy-In:*** After initial awareness activities, a school faculty undertakes an Application Process during which they commit to the program (an 80% vote is required) and engage in initial planning to outline its local TDHS design.
- ***Initial Training:*** School administrators and faculty plan and attend a two-day retreat in which program staff provide technical assistance in school organization. A program facilitator is assigned to the school.
- ***Follow-Up Coaching:*** Over the first and second years, the program facilitator and other program staff provide on-going coaching and technical assistance in the development of the school organization components and the math, science, and language arts curriculum components.
- ***Networking:*** Urban districts form a local network of TDHS schools. The network begins with implementation in one or two schools, then adds schools as the use of the program expands. Additionally, a Web site and a national network coordinated by Hopkins/Howard are being established.
- ***Implementation Review:*** Through the first two years, implementation is reviewed during coaching sessions. Schools also complete survey forms annually to report on implementation and program effects.

## Costs

Planning year and implementation year costs vary due to school configurations and availability of time. Redesign of entrances, signs, and space for the Academies must be covered, as well as time for teachers to plan Academies and attend workshops. Additional management team leaders for each Academy may need to be added to staff if redeployment of Vice Principals and Department Chairs is insufficient. In addition, there are the following fixed costs:

- **Partnership Fee:** An annual fee of \$10,000 covers faculty and student surveys and feedback, and regular contact with a dedicated school point person from the design team.
- **Technical Assistance:** Technical assistance from TDHS facilitators ranges from 10 to 40 days per year, depending on local circumstances, and costs between \$10,000 and \$50,000.
- **Professional Development:** The school must fund the FTE of one to two teachers from the local district, who serve as curriculum coaches. English and math teachers will need to receive the local rate for attending up to 25 hours of professional development.
- **Curriculum Materials:** The cost of texts and materials for 500 ninth-graders taking Transition to Advanced Mathematics, Strategic Reading, and Freshman Seminar courses is approximately \$35,700 the first year and \$17,000 the second year. For upper grade English classes, Partner Discussion Guides and student worksheets for Student Team Literature are available for many novels and plays, at an average cost of \$350 per novel or play for each teacher.
- **Student Survey:** The Holland interest survey is given to all students during the planning year at a cost of \$2.55 per student.

## Student Populations

The program is designed to serve students in large, usually urban, high schools in which attendance, discipline, safety, high dropout, and low student achievement are issues.

## Special Considerations

None.

## Evaluations

### Developer

McPartland, J. M., Legters, N., Jordan, W., & McDill, E. L. (1996). *The Talent Development High School: Early evidence of impact on school climate, attendance, and student development* (Report No. 2). Baltimore: Johns Hopkins University Center for Research on the Education of Students Placed At Risk.

Legters, N., Jordan, W., & McPartland, J. M. (1997). Effects on teachers and students after two years in a Talent Development High School. Paper presented at the annual meeting of the American Educational Research Association, Chicago.

### Outside Researchers

None available.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Edison High School 151 West Luzerne Street Philadelphia, PA 19140 215-324-9440 Contact: Joseph E. Lebron	2,809	large city	18%	0%	2%	78%	3%	91%	18%	18%
Strawberry Mansion High School 3133 Ridge Avenue Philadelphia, PA 19121 215-684-5089 Contact: Charles Highsmith	1,539	large city	99%	0%	0%	1%	0%	90%	0%	10%
Patterson High School 100 Kane Street Baltimore, MD 21224 410-396-9276 Contact: Laura D'Anna	2,276	large city	67%	3%	2%	3%	26%	63%	2%	15%
Wingate High School PO Box 2 Fort Wingate, NM 87316 505-488-6418 Contact: Adam Bull	250	rural	0%	100%	0%	0%	0%	96%	48%	20%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

### For more information, contact:

James McPartland  
Talent Development High School  
3003 North Charles Street, Suite 200  
Baltimore, MD 21218  
Phone: 410-516-8800  
Fax: 410-516-8890  
E-mail: [jmcpartland@csos.jhu.edu](mailto:jmcpartland@csos.jhu.edu)

## Talent Development Middle School (4-9)

IN BRIEF	
Talent Development Middle School	
<b>Founder</b>	Johns Hopkins University
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1995
<b># Schools Served (6/1/00)</b>	21
<b>Level</b>	4-9
<b>Primary Goal</b>	to create high-performing schools by providing all teachers with training, support, and materials and all students with standards-based learning opportunities and supportive learning environments
<b>Main Features</b>	<ul style="list-style-type: none"><li>• focused and sustained professional development</li><li>• standards-based instructional programs in each subject</li><li>• frequent extra help</li><li>• restructuring of school organization and staffing</li></ul>
<b>Impact on Instruction</b>	high level core curriculum for all students combined with hands-on, inquiry-oriented teaching strategies
<b>Impact on Organization/Staffing</b>	small learning communities with looping and subject-area teams
<b>Impact on Schedule</b>	double period for reading/language arts; extra help and acceleration scheduled as electives
<b>Subject-Area Programs Provided by Developer</b>	yes: reading/language arts, math, science, U.S. history, career exploration, extra help
<b>Parental Involvement</b>	Epstein's Partnership Schools model for establishing strategic school-family-community partnerships
<b>Technology</b>	integrated into curricular areas; extra help program requires a 10-computer lab
<b>Materials</b>	some provided by developer

Project and designed to enable all students to succeed in algebra in eighth grade; (c) an inquiry-oriented science curriculum linked to national standards; (d) a U.S. history course built around a multicultural narrative series; and (e) extra help programs in mathematics and reading for students who need it.

Other elements include a three-year career and education exploration course; membership in the National Network of Partnership Schools (a network designed to help schools build strong relationships with parents and communities); and professional development in reading, language arts, mathematics, science, and U.S. history, with follow-up in-school support. TDMS also encourages changes in organizational structures when possible. These include small learning communities, looping, teaching teams, common planning periods, and semi-departmentalization. Finally, the model includes a program for creating positive learning and teaching climates in schools.

### Origin/Scope

The Talent Development Middle School (TDMS) is a whole-school reform model developed by researchers, educators, and curriculum writers at Johns Hopkins University in collaboration with middle school practitioners. The TDMS four-year pilot included five schools in Philadelphia. The model currently serves 21 schools in four states.

### General Description

The TDMS mission is to establish standards-driven curriculum, instruction, school organization, and professional development that enable all students to learn challenging academic material and prepare for future education and careers. Key elements of the reform include: (a) Student Team Literature, a cooperative learning approach to reading/language arts; (b) a research- and standards-based math curriculum built around materials developed by the University of Chicago School Mathematics

## Results

TDMS model developers and researchers closely associated with the model conducted a series of controlled studies in Philadelphia on the impact of the model on students' reading and math achievement. One study examined reading scores at two schools, Central East and Cooke Middle, and their comparisons on the Stanford 9 test. During the first year of implementation of Student Team Literature, Cooke students outgained comparison students by 5 scale score points; this variation is not statistically significant. In another study, Central East TDMS students outgained control students by 12 points over the course of one academic year, a statistically significant variation. Yet another study showed that in math, Cooke students outgained comparison students by over 3 NCEs in Total Mathematics Achievement over one academic year, also a statistically significant variation. These schools have continued to display achievement gains in all subsequent years for which data are available. For example, in reading comprehension at Central East Middle School, the average annual effect size (measuring how much a typical Central East student outgained a typical comparison student each year) across a three-year span was 0.29 standard deviations. An effect size of over 0.25 is generally considered educationally significant. At Cooke, the average two-year gain was 14 NCEs in math and 14 NCEs in reading versus a 7 NCE gain in math and an 8 NCE gain in reading at Cooke's comparison school.

Additionally, independent researchers report positive effects on pedagogy, content, and learning environment.

## Implementation Assistance

- ***Project Capacity:*** The TDMS program is housed at the Center for the Social Organization of Schools at Johns Hopkins University. The program has 26 full- and six part-time staff members.
- ***Faculty Buy-In:*** At least 80 percent of a school's faculty and professional staff must vote in favor of the model by secret ballot.
- ***Initial Training:*** Teachers receive 36 hours of professional development per year per subject from a TDMS instructional facilitator, usually as a combination of after-school and half-day Saturday sessions. However, TDMS will plan a schedule that meets schools' needs. Teachers in the core subject areas implementing the model participate. In communities where TDMS works with more than one school, teachers rotate schools for workshops. Otherwise, workshops are on-site. The instructional facilitator in each subject area works with designated school staff to design the training. The training, which is grade and subject specific, generally involves extensive content information, teaching strategies such as cooperative learning, lesson modeling and review, and facilitation support.
- ***Follow-Up Coaching:*** There are two tiers of follow-up support. First, the model recommends that TDMS instructional facilitators provide 10-20 days of on-site coaching per subject per year for at least two years. Second, each school appoints a local curriculum coach and one or more lead teachers (ideally, one per core subject area), all of whom receive additional training from TDMS and provide on-going support to colleagues. The curriculum coach is released from some teaching duties; the lead teachers may continue to teach full-time.
- ***Networking:*** A week-long summer institute is held each August for teachers and other

staff. A monthly newsletter and an electronic learning community provide further networking opportunities. All participating schools are members in the National Network of Partnership Schools.

- **Implementation Review:** Each school receives a quarterly report based upon a variety of measures (e.g., facilitator ratings of implementation, results from teacher focus groups, and summaries of teachers' self-assessment checklists).

## Costs

### I. TDMS Support Services

- Annual curriculum development and implementation support fee: \$18,000/year
- On-site support provided by TDMS facilitator (10-20 days per year per subject recommended): \$1,000/day plus expenses

### II. Curriculum Coach/Lead Teacher Support

- Equivalent of 1.0 to 1.5 FTE, depending on school size and pace of implementation

### III. Stipends/Release Time for Teachers

- Costs of providing 36 hours per teacher per subject being implemented

### IV. Materials

- \$615 per grade plus books for reading/language arts
- \$6,000 to \$11,000 per grade in science
- \$2,750 per grade in social studies
- \$5,000-\$10,000 per grade in mathematics

In each subject area, TDMS uses research- and standards-based materials that are commercially available, as well as materials produced by the model. Schools can stagger their purchase of these materials (buying one subject per year) to spread costs over time.

## Student Populations

The model has been implemented mainly in high-poverty urban schools serving large numbers of disadvantaged students and children with disabilities. It also has been implemented in several schools serving large numbers of English language learners. Spanish language curriculum materials are available for some instructional programs.

## Special Considerations

TDMS holds a strong anti-tracking philosophy.

## Selected Evaluations

### Developer/Implementer

Balfanz, R., & Mac Iver, D. (2000). Transforming high-poverty urban middle schools into strong learning institutions: Lessons from the first five years of the Talent Development Middle School. *Journal of Education for Students Placed at Risk*, 5(1 & 2): 137-158.

Mac Iver, D., Mac Iver, M., Balfanz, R., Plank, S. B., & Ruby, A. (2000). Talent Development Middle Schools: Blueprint and results for a comprehensive whole-school reform model. In M. G. Sanders (Ed.), *Schooling students placed at risk*:

### Independent Researchers

Useem, E. (1998). *Teachers' appraisals of Talent Development Middle School training, materials, and student progress* (CRESPAR Report No. 25). Baltimore & Washington, DC: Center for Research on the Education of Students Placed at Risk.

Useem, E. (1999). *Year two of Talent Development at Cooke Middle School: A report from two focus groups*. Philadelphia: Philadelphia Education Fund.

Useem, E. (2000). *New teachers' appraisals of the Talent*

*Research, policy, and practice in the education of poor and minority adolescents* (pp. 292-319). Mahwah, NJ: Erlbaum.  
 Available on-line:  
[www.csos.jhu.edu/crespar/Reports/report15.pdf](http://www.csos.jhu.edu/crespar/Reports/report15.pdf)  
 Plank, S. B., & Young, E. (2000). *Lessons for scaling up: Evaluations of the Talent Development Middle School's Student Team Literature Program* (CRESPAR Report No. 46). Baltimore & Washington, DC: Center for Research on the Education of Students Placed At Risk. Available on-line:  
[www.csos.jhu.edu/crespar/Reports/report46.pdf](http://www.csos.jhu.edu/crespar/Reports/report46.pdf)

*Development Middle School training and curriculum.*  
 Philadelphia: Philadelphia Education Fund.  
 Wilson, B. L., & Corbett, H. D. (1999). *"No excuses": The eighth grade year in six Philadelphia middle schools.*  
 Philadelphia: Philadelphia Education Fund.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Central East (5-8) 238 East Wyoming Avenue Philadelphia, PA 19120 215-456-3012 Principal: John Frangipani	1,104	large city	29%	0%	12%	47%	11%	90%	M	M
Cooke (5-8) 13 <sup>th</sup> and Louden Street Philadelphia, PA 19141 215-456-3002 Principal: Joann Cooke	1,040	large city	80%	<1%	12%	7%	1%	86%	M	M
Clemente (5-8) 122 West Erie Avenue Philadelphia, PA 19140 215-291-5400 Principal: Patricia Mazzuca	1,482	large city	31%	<1%	<1%	67%	1%	90%	M	M
Sherwood (6-8) 3480 Rhodes Avenue Memphis, TN 38111 901-325-4870 Principal: Denise Johnson	1,067	large city	97%	<1%	1%	1%	1%	90%	M	M

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.  
 M = Missing data.

## For more information, contact:

Kathy Nelson, Field Manager  
 Talent Development Middle Schools  
 Center for Research on the Education of Students Placed At Risk  
 Johns Hopkins University  
 3003 North Charles Street, Suite 200  
 Baltimore, MD 21218  
 Phone: 410-516-6431  
 Fax: 410-516-8890  
 E-mail: [knelson@csos.jhu.edu](mailto:knelson@csos.jhu.edu)  
 Web site: [www.csos.jhu.edu](http://www.csos.jhu.edu)

## The Learning Network (K-8)

IN BRIEF	
The Learning Network	
<b>Founder</b>	Richard C. Owen Publishers, Inc.
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1992
<b># Schools Served (5/1/01)</b>	over 200
<b>Level</b>	K-8
<b>Primary Goal</b>	to support schoolwide changes in teachers' theory and practice that lead to improved learning outcomes for children
<b>Main Features</b>	<ul style="list-style-type: none"><li>• builds into each school a mechanism for continuous professional development</li><li>• uses classroom observation, action plans, and instructional dialogue as the vehicle for change</li><li>• focuses on literacy as a key curricular area</li><li>• emphasizes the Literacy Learning model: assessment, evaluation, planning, and teaching</li></ul>
<b>Impact on Instruction</b>	student-centered instruction using the Literacy Learning model
<b>Impact on Organization/Staffing</b>	establishes critical triangle of support: principal, two teacher leaders, and TLN coordinator; requires substantial release time for teacher leaders starting in second year of implementation
<b>Impact on Schedule</b>	reading and writing become part of an expanded literacy block
<b>Subject-Area Programs Provided by Developer</b>	yes (focus is currently on literacy; math focus is being developed)
<b>Parental Involvement</b>	expectation of parental involvement that is especially notable in the development of policy statements
<b>Technology</b>	Internet access for listserv support
<b>Materials</b>	administrator and teacher leader handbooks; key professional resources for teachers; core resources for instructional resource room

- establishes consistent language and procedures throughout the school;
- is founded on a view of teaching and learning as a cyclic activity.

The Literacy Learning model is the foundation for TLN. It consists of the four key elements of the teaching and learning cycle: assessment, evaluation, planning, and teaching, supported by an understanding of the reading process, the writing process, and the conditions that are favorable for learning. This cycle defines the process by which teachers make instructional decisions and then act on them. One strength of the model is that it is applicable to any teaching and learning situation, from a teacher working with kindergarten students to an administrator working with a group of teachers.

### Origin/Scope

Literacy Learning in the Classroom, a four-day summer institute, was established by Richard C. Owen Publishers in 1989. Its purpose was to help teachers explore an approach developed in New Zealand called the Literacy Learning model, a theory of teaching and learning that puts children at the center of the curriculum. In 1992, the company created The Learning Network (TLN) to support schoolwide implementation of the Literacy Learning model. Over the past eight years, over 200 schools have joined the network.

### General Description

The goals of TLN are to support changes in the attitudes, understandings, and behaviors of teachers that lead to improved learning outcomes for children, and to support long-lasting changes in the way the school organizes for teaching and learning.

TLN is based upon the belief that good classroom practice:

- crosses curricular boundaries;
- applies to any age group;

TLN is implemented by a critical triangle of professionals: the TLN coordinator, the school principal, and a team of two teacher leaders. Supported by the principal, the coordinator works directly with the teacher leaders during the first year. A key element of TLN is instructional dialogue, or professional conversation between the coordinator and the teacher leaders. After observing them in the classroom, the coordinator guides them through an exploration of teaching and learning designed to result in changes in classroom practice. During the second year, teacher leaders work through the same process with colleagues.

In the third and subsequent years the effort expands to include more of the faculty and to focus on developing the school as a learning organization. The critical triangle works with the faculty to identify a schoolwide focus and write policy statements that define the values and objectives of the school. Policy statements are content-specific documents that connect the collective beliefs of the staff to state and district requirements. Periodic evaluation of policy statement objectives provides guidance for ongoing professional development.

## Results

Lasting changes in teacher behavior must precede changes in student achievement. In two separate studies, independent researchers reported significant changes in teachers' classroom practice in TLN schools in Arizona and Colorado.

The Colorado study also examined student achievement, reporting continuous improvement on three different measures (ITBS, Riverside Integrated Language Arts Performance Assessment, and a locally developed writing assessment) at the elementary school with the fullest implementation. Results for other schools in the study were mixed.

Numerous comparisons of students whose teachers are supported by TLN with students whose teachers have not received such support show consistent results in favor of TLN. For example, a quasi-experimental study of two fourth grade classes in Montana, one with a TLN teacher leader and the other with a non-TLN teacher, compared student scores on the ITBS. In all subjects tested except science (including reading, writing, language arts, math, and social studies), students in the TLN teacher's class demonstrated significant improvement from 1997 to 1998. The control group demonstrated significant improvement only in social studies. In Arlington, Texas, students in grades three through six whose teachers had been supported by TLN for two years showed mean gains in reading comprehension on the TAAS (Texas Assessment of Academic Skills) of almost 10 points from 1997 to 1998, compared to a mean gain of 3.5 points for students of non-TLN teachers. Similar results have been found in schools in Colorado, Florida, and Arizona using the ITBS, the SAT 9, and Florida Writes (a state performance assessment).

## Implementation Assistance

- **Project Capacity:** At present TLN has 16 part- and full-time coordinators. Each year a new class of 4 to 6 coordinators begins training. Training includes one year of support while coordinators are in their own classrooms, two years of intensive support while they work with schools, and continuing support for as long as they are working with TLN.
- **Faculty Buy-In:** TLN expects each school eventually to implement the model schoolwide. This generally does not happen at the outset, however. The school needs the advocacy of the principal, the commitment of a core group of teachers, and at least two qualified candidates for training as teacher leaders.

- **Initial Training:** Prior to the first year of implementation, the principal and teacher leader candidates attend the four-day summer institute, Literacy Learning in the Classroom. Each summer thereafter the teachers who will be supported the following year by a teacher leader attend the institute.
- **Follow-Up Coaching:** A key component of TLN is the training of two school-based teacher leaders. During the first year, the coordinator makes a monthly visit to the school and spends much of the time observing and engaging teacher leaders in instructional dialogue (discussed above). In year two the teacher leaders begin working in similar fashion with colleagues on a weekly basis. The coordinator works alongside the teacher leaders, providing support as needed.
- **Networking:** The principal and teacher leaders participate in twice-monthly focus meetings with counterparts from other schools in their class. (The basic design calls for four schools per class.) They also attend the annual leadership seminar and the annual conference. A listserv is available for additional networking.
- **Implementation Review:** Benchmarks and Indicators of Teaching are used by teacher leaders to measure progress. Additionally, the school prepares an End-of-Year Review each year. After the end of the second year, TLN is available for periodic support, limited to a maximum of four days in each year. This support monitors the effectiveness of the school in reaching set goals.

## Costs

For the first two years, the charge for the TLN coordinator is \$12,000 per year. Coordinator travel expenses, if applicable, are extra. All members of the faculty eventually attend the summer institute, which is \$350 per person. The leadership seminar (for the principal and two teacher leaders) is \$250 per person. The principal and teacher leaders are required to purchase professional resources that cost about \$100 per person. During the first two years there is no charge for registration at The Learning Network Conference for the principal and teacher leaders, but they do have to pay travel expenses.

In year one, teacher leaders need approximately 16 days of release time each (partial support in each of 8 days to work with the coordinator and 2 half-days per month for focus group meetings). In year two, TLN recommends 50 percent release time for each teacher leader. (In other words, the school will be adding one FTE.) Some release time also will have to be provided for the 16 teachers to be supported by the two teacher leaders. Additionally, the school will begin to build an instructional resource room.

## Student Populations

Having been implemented in locations as diverse as New York City and Readsboro, Vermont, TLN has demonstrated its appropriateness for urban as well as rural schools. Many of its schools are Title I. Several in Denver and Texas are bilingual schools. No special materials are required for implementation in such schools, although TLN does publish a few Spanish language resources for young children. Special needs populations are included in all aspects of the model, which leads toward inclusion in the regular classroom.

## Special Considerations

Any situation that promotes change has the potential to produce resistance. The goal of TLN is not to tell people what to do, but to help teachers understand teaching and learning in

ways that lead to productive change. TLN helps the leadership team become proactive in dealing with resistance. Problem solving becomes part of the school culture.

## Selected Evaluations

### Developer

Elser, T. (1999). *A quasi-experimental, comparative case study of The Learning Network as implemented by Arlee Elementary School*. Unpublished manuscript.

### Outside Researchers

Spencer, D. A. (1998). *The Phoenix ExCel Promising Places Project: Learning Network evaluation*. Unpublished manuscript.  
 Billig, S. H., Lurie, J., & Hoffman, D. (1998). *Aurora balanced literacy approach: Impact on achievement*. Denver: RMC Research Corporation.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Montview Elementary School 2055 Moline Street Aurora, CO 80010 303-364-8549 Contact: Debbie Backus	856	urban fringe of large city	28%	1%	5%	44%	22%	75%	68%	8%
Maple Elementary School 429 Division Street Jeffersonville, IN 47130 812-288-4860 Contact: Cathy Graninger	374	urban fringe of large city	31%	1%	1%	0%	67%	55%	1%	24%
Prairie Park Elementary School 2711 Kensington Lawrence, KS 66046 785-832-5740 Contact: Vicki Weseman	436	mid- size city	11%	6%	1%	3%	78%	26%	0%	15%
Auburn Elementary School 4612 Auburn Road NE Salem, OR 97301 503-399-3128 Contact: Sue Peters	566	mid- size city	1%	2%	2%	10%	85%	55%	83%	15%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

## For more information, contact:

Richard C. Owen, President  
 The Learning Network  
 Richard C. Owen Publishers, Inc.  
 PO Box 585  
 Katonah, NY 10536

Phone: 914-232-3903  
 Fax: 914-232-3977  
 E-mail: [RichardOwen@rcowen.com](mailto:RichardOwen@rcowen.com)  
 Web site: <http://www.rcowen.com>

## Turning Points (6-8)

IN BRIEF Turning Points	
<b>Founder</b>	Center for Collaborative Education
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1998
<b># Schools Served (6/1/00)</b>	30
<b>Level</b>	6-8
<b>Primary Goal</b>	improving teaching, learning, and achievement for all students in middle schools, including those with special needs
<b>Main Features</b>	<ul style="list-style-type: none"><li>building leadership capacity and a professional collaborative culture</li><li>using data-based inquiry and decision making</li><li>creating a school culture to support high achievement and personal development</li><li>networking with other schools</li><li>developing district capacity to support school change</li></ul>
<b>Impact on Instruction</b>	wide range of flexible instructional strategies and curriculum
<b>Impact on Organization/ Staffing</b>	shared decision making through a representative leadership team; teacher teams engaged in curricular and organizational decisions; external coach and in-house facilitator
<b>Impact on Schedule</b>	flexible schedules with longer blocks of learning and common planning time
<b>Subject-Area Programs Provided by Developer</b>	no
<b>Parental Involvement</b>	focus on building parent and community partnerships including involvement in decision making and students' learning
<b>Technology</b>	Internet access for support through interactive TP Web site
<b>Materials</b>	Turning Points Guides, including teacher resources covering TP Practices, literacy, and numeracy

### Origin/Scope

Turning Points is a middle school change design developed and coordinated by the Center for Collaborative Education in Boston, Massachusetts. The design, a New American Schools model, is based on the *Turning Points* report issued by the Carnegie Corporation in 1989, which concentrated on the considerable risks that young adolescents face as they reach the "turning point" between childhood and adulthood. In 1999, the first year of implementation as the Turning Points Model, there were 30 schools in three states.

### General Description

Turning Points is a comprehensive school reform design for middle school change that seeks to create high-performing schools, especially those serving high percentages of low-income students and students of color. The model includes support through on-site coaching, networking, professional development, a self-study survey, resource guides, a Web site, and an accountability process. The goal of this systemic approach is to dramatically improve teaching, learning, and achievement

for all students, including those with special needs. In order to sustain whole school change, middle level schools engage in the following six practices based on the Turning Points principles:

**Improving Learning, Teaching, and Assessment for All Students:** Faculty use local and state standards to develop curriculum with a focus on literacy and numeracy, select instructional strategies to meet the diverse needs of all students, and develop authentic assessments.

**Building Leadership Capacity and a Professional Collaborative Culture:** Faculty create a democratic school community, establish a leadership team and teacher study groups, examine

student and teacher work, and engage in other ongoing professional learning.

**Data-Based Inquiry and Decision Making:** Faculty and students complete an annual self-study survey on all areas of the school. These data, together with a range of other measures, are used to identify strengths and gaps, and develop solutions for improving learning.

**Creating a School Culture to Support High Achievement and Personal Development:** Schools redirect resources to create small learning communities, eliminate rigid ability grouping, create longer blocks of learning time, and build family and community partnerships.

**Networking with Like-Minded Schools:** Schools engage in a supportive professional network, participating in a range of school-year and summer network activities.

**Developing District Capacity to Support School Change:** Districts partner with Turning Points schools to provide them with increased flexibility and autonomy to be innovative.

## Results

No systematic evaluations have been conducted on the impact of Turning Points among the schools implementing the new design. However, studies have focused on the impact of reform efforts in schools using the Turning Points principles. The Center for Prevention Research and Development at the University of Illinois conducted a Self Study Survey of the Middle Start Initiative (Turning Points) in Michigan, comparing 20 schools receiving grants to implement the design with 127 other schools in the state not receiving this grant. The study showed that schools implementing the Turning Points principles improved in reading by 10 percent (versus a 4 percent gain by non-grant schools) and in math by 6 percent (versus 4 percent by non-grant schools) between 1994-95 and 1996-97 on the Michigan Educational Assessment Program. Achievement data were not disaggregated by demographic indicators.

Another study by the same center examined 31 middle schools in Illinois that agreed to implement the Turning Points principles. The study reported that after two years (from 1990-91 to 1991-92), sixth- and eighth-grade students in schools with high levels of implementation outperformed students in lower-implementing schools on the state achievement test by 275 to 247 in reading, 315 to 254 in language, and 298 to 248 in mathematics (the state mean score was 250 with a standard deviation of 50 points). Over the two-year period, composite test scores of high-implementation schools improved by 21 points, compared to a one-point decline in scores at the lowest-implementing schools. This pattern held for at-risk students as well as the general student population.

## Implementation Assistance

- **Project Capacity:** The Turning Points National Center is in Boston. Regional Centers include the Association of Illinois Middle Schools (AIMS), Public Education and Business Coalition (PEBC) based in Denver, and the Missouri School Reform Center.
- **Faculty Buy-In:** Before a school adopts Turning Points, faculty research and discuss reform models and explore what it means to be a Turning Points school. A faculty vote is taken, and 80 percent approval is required for joining the Turning Points Network.
- **Initial Training:** An initial exploration phase consists of onsite and offsite meetings and workshops. This phase may take place from two to six months before the model is formally implemented. It involves up to three meetings with school leaders and/or faculty and takes from four to eight hours spread over this period. Turning Points staff communicate with an Exploring Team, a school team that includes the principal and volunteers representing each grade or discipline team. Activities include an overview of

the Turning Points design, the coach's role, and the Memorandum of Agreement, along with an informal assessment of the school.

- **Follow-Up Coaching:** Schools receive 30 days per year of support from Turning Points. The Turning Points coach supports teachers' professional development and builds shared leadership, meeting regularly with the leadership team, principal and in-house facilitator, academic and discipline-based teams, study groups, and the full faculty to assist the school in implementing the six practices.
- **Networking:** Networking opportunities include three network meetings each school year, a four-day summer leadership institute, a three-day summer institute for teacher teams, two-day critical friends visits between member schools, school labs, and a National Conference. The model publishes a national newsletter and is developing an interactive Web site and e-mail service. The Web site will host facilitated discussion groups on the six practices and post tools, strategies, school-developed curriculum units, and information and research on the model.
- **Implementation Review:** All Turning Points schools complete the Self Study Survey developed by the Center for Prevention Research and Development once every two years. The survey provides comprehensive data on school demographics, teaching, learning, assessment, teaming, leadership, climate, and student adjustment and behavior. In addition, schools use the Turning Points Benchmarks to measure progress in an annual assessment and goal-setting process, and in a more intensive School Quality Review every three to four years.

## Costs

Full implementation of the Turning Points model costs schools approximately \$50,000 per year. The fee covers all materials and services (including 30 days of coaching, network meetings and summer institutes, and administering the Self Study Survey). It may vary somewhat according to the school's context. Additional costs to the school include the time of the in-house facilitator, faculty release time, and/or stipends.

## Student Populations

Turning Points, based on ten years of research and practice in urban, rural, and suburban middle schools, seeks to create high-performing schools serving high percentages of low-income students and students of color. Work with rural middle schools focuses on building the capacity of school-based facilitators and using the Turning Points Web site for ongoing professional development and networking.

## Special Considerations

Schools must commit to having a common planning time and scheduled time for professional development, a representative Leadership Team, and assessment of progress.

## Selected Evaluations

### Developer/Implementer

Fellner, R. D., Jackson, A. W., Kasak, D., Mulhall, P., Brand, S., & Flowers, N. (1997, March). The impact of school reform for the middle years: Longitudinal study of a network engaged in *Turning Points*-based comprehensive

### Independent Researchers

DePascale, C. A. (1997). *Education Reform Restructuring Network: Impact documentation report*. Cambridge, MA: Data Analysis & Testing Associates.  
Mertens, S. B., Flowers, N., & Mulhall, P. (1998). *The Middle*

school transformation. *Phi Delta Kappan*, pp. 528-550.

*Start Initiative, phase I: A longitudinal analysis of Michigan middle-grades schools*. Champaign, IL: University of Illinois, Center for Prevention Research and Development. Available on-line: <http://www.cprd.uiuc.edu/>

## Sample Sites

<i>School/Contact</i>	<i>Size</i>	<i>Locale</i>	<i>Race/Ethnicity</i>					<i>Free Lunch Elig.</i>	<i>ELL</i>	<i>Students with Disab.</i>
			<i>African Amer.</i>	<i>Am. Ind./Alaskan</i>	<i>Asian Amer.</i>	<i>Hisp.</i>	<i>White</i>			
Lincoln Middle School 700 Mary Peoria, IL 61603 309-672-6542 Principal: Ron Hayes	402	mid-size city	56%	2%	3%	8%	21% (10% multi-racial)	87%	3%	18%
Eastgate Middle School 4700 NE Parvin Road Kansas City, MO 64117 816-413-5800 Principal: Tim Mattson	925	large city	8%	<1%	3%	3%	84%	42%	15%	20%
Amherst Regional Middle School 70 Chestnut Street Amherst, MA 01002 413-549-9845 Principal: Mary Cavalier	691	urban fringe of mid-size city	8%	1%	9%	7%	75%	25%	5%	M
John McCormack Middle School 315 Mt Vernon Dorchester, MA 02125 617-635-8657 Principal: Muriel Leonard	760	large city	51%	<1%	5%	30%	14%	86%	27%	M

The data in this table are reported for the 1999-2000 school year. M= Missing data.

## For more information, contact:

Leah Rugen  
National Turning Points Program Director  
Turning Points National Center  
1135 Tremont Street, Suite 490  
Boston, MA 02120  
Phone: 617-421-0134  
Fax: 617-421-9016  
E-mail: [lrugen@ccebos.org](mailto:lrugen@ccebos.org)  
Web site: <http://www.turningpts.org>

# Urban Learning Centers (Pre-K12)

IN BRIEF Urban Learning Centers	
<b>Founder</b>	Los Angeles Unified School District; United Teachers Los Angeles; Los Angeles Educational Partnership
<b>Current Service Provider</b>	National center based at the Los Angeles Educational Partnership
<b>Year Established</b>	1992
<b># Schools Served (5/1/01)</b>	29
<b>Level</b>	preK-12
<b>Primary Goal</b>	to create learning environments where high-quality instruction is supported by a well organized school that is strongly connected to its community
<b>Main Features</b>	<ul style="list-style-type: none"> <li>• thematic, interdisciplinary curriculum</li> <li>• transitions from school to work and postsecondary education</li> <li>• integrated health and human services on school site</li> <li>• collaborative governance model</li> </ul>
<b>Impact on Instruction</b>	program works with staff to develop curriculum and instruction approaches
<b>Impact on Organization/ Staffing</b>	professional development (5-10 days); structural changes (e.g., heterogeneously grouped classrooms, team teaching); shared decision-making with school community
<b>Impact on Schedule</b>	schools likely to be open for longer hours and throughout summer
<b>Subject-Area Programs Provided by Developer</b>	provides content training in math, science, and literacy
<b>Parental Involvement</b>	parental involvement in governance; school/home partnerships; adult programs on K-12 campus
<b>Technology</b>	technology supports all elements of the design; cost varies
<b>Materials</b>	provided as part of design fee

## Origin/Scope

The Urban Learning Centers design (originally called Los Angeles Learning Centers) emerged in 1992 when it was chosen as one of the New American Schools Design Teams. It was a joint effort of the Los Angeles Unified School District, the United Teachers Los Angeles, and the Los Angeles Educational Partnership. Initially the design was implemented in two schools in Los Angeles. As of May 2001, it was operating in 29 schools.

## General Description

The Urban Learning Centers is a comprehensive design for urban schools that calls for their reinvention into preK-12 “articulated communities,” or systems for collaboration between all grade levels and schools (if K-12 is not contained on one campus). The design grows out of the work of experienced teachers and other educators, parents, community members, curriculum developers, technology specialists, and managerial consultants.

Each learning center comprises three essential components:

- **Teaching and Learning:** encompasses the content, structures, and processes of curriculum and teaching, including the integration of standards, a thematic, interdisciplinary curriculum, transitions from school to work and to postsecondary education, and project-based experiential learning opportunities;
- **Learning Supports:** develops a sense of community within and without schools, integrating health and human services at the school site; and
- **Governance and Management:** advances empowerment of and collaboration among all learning community members: students, parents, teachers, administrators, staff, and community members.

The Urban Learning Centers uses technology to support all elements of the design. Within the instructional program, students and staff use technology as a tool to obtain, construct, and communicate knowledge. Administrative uses include communications, programmatic budgeting, and assessing achievement trends. In addition, technology assists the learning supports component with locating, referring, and then tracking the outcomes of students needing social services.

Each model school possesses a Learning Support system on campus that includes a family center, a complete health clinic, a parent volunteer program, and an array of parent education classes.

## Results

Ninety-eight percent of the first graduating class at the two model Urban Learning Centers were accepted to post-secondary institutions. These results support research that smaller high schools improve student outcomes, even in troubled urban areas.

## Implementation Assistance

- **Project Capacity:** National center based at the Los Angeles Educational Partnership.
- **Faculty Buy-In:** Urban Learning Centers require enthusiastic support of school leadership, consensus of the school community, a signed memo of understanding, and the allocation of 1.5 FTE (full-time equivalent) for staff to coordinate implementation.
- **Initial Training:** Extensive on- and off-site professional development in the first year of implementation (training by program staff on design implementation and networking with other schools) for all staff members and selected parents.
- **Follow-Up Coaching:** Continued on- and off-site professional development on implementing the design, goal setting, reviewing lessons learned, and collaborating with other schools.
- **Networking:** 1-800 hotline and e-mail for technical support; resource library of materials on best practices and standards that match Urban Learning Centers design; Web site for supporting information.
- **Implementation Review:** Urban Learning Centers staff works with each participating school annually to analyze progress in student achievement and implementation.

## Costs

The cost of the Urban Learning Centers design depends upon the size of the school; the number of students, faculty, and tracks; and the school's specific needs. Based on these variables, Urban Learning Centers contracts range from \$25,000 to over \$80,000. Following is the standard full implementation package offered to large schools (1,000 or more students):

Service	Days	Cost
Self Assessment and Strategic Planning	10	\$10,000
Field Director	10	\$10,000
Teaching and Learning	20	\$20,000
Governance and Management	20	\$20,000
Learning Supports	20	\$20,000
Full Implementation at a Large Single Site		\$80,000

Schools may reduce costs and/or increase the days of service by participating in joint training with neighboring or feeder schools. Schools also may choose to focus initially on selected areas of implementation: \$10,000 for Self Assessment, \$30,000 for the Self Assessment plus work in any one design component, etc.

Finally, schools may contract for a basic package of post-implementation services for \$2,500. The package entitles schools to membership in the Urban Learning Centers network, which includes a newsletter; five registrations for the annual institute; technical assistance via phone, e-mail, and Web site; and continued analysis of the school's achievement data and implementation status. Schools may continue to contract for on-site technical assistance at the daily rate of \$1,000.

## Student Populations

The design is a comprehensive preK-12 model for urban schools. In Los Angeles, urban schools have a diverse ethnic population and many students speak English as a second language. More than 60% of the families at these school are at or below the federal poverty level and transience rates are also very high.

## Special Considerations

Urban Learning Centers is a preK-12 design that works well with two to five elementary and secondary schools located in the same neighborhood and sharing the same student population. An ideal combination is three elementary schools, one middle school, and one high school. However, the design is also well suited to other combinations which cross over between the elementary and secondary levels.

## Selected Evaluations

### Developer

None available.

### Outside Researchers

Aschbacher, P., & Rector, J. (1996). *Los Angeles Learning Centers evaluation report: July 1994 to June 1995*. Los Angeles, CA: Center for the Study of Evaluation.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Foshay Learning Center (K-12) 3751 South Harvard Boulevard Los Angeles, CA 90018 323-735-0241 Contact: Howard Lappin	3,426	large city	30%	0%	0%	70%	0%	90%	33%	9%
Laurel Elementary 1321 West Laurel Street Compton, CA 90220 310-898-6440 Contact: Steven Schatz	379	urban fringe of large city	15%	0%	0%	85%	0%	89%	80%	4%

Westwood Middle School 500 Apollo Street Danville, VA 24540 804-797-8860 Contact: Laurell Malone	598	mid-size city	67%	0%	0%	0%	33%	53%	1%	16%
Pleasant Green Elementary 8201 West 2700 South Magna, UT 84044 801-250-8635 Contact: Judith Kissell	770	urban fringe of mid-size city	1%	2%	3%	13%	81%	41%	9%	3%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

### For more information, contact:

Greta Pruitt  
 Urban Learning Centers  
 315 West 9th Street, Suite 1110  
 Los Angeles, CA 90015  
 Phone: 213-622-5237, ext. 274  
 Fax: 213-629-5288  
 E-mail: [gpruitt@urbanlearning.org](mailto:gpruitt@urbanlearning.org)  
 Web site: <http://www.urbanlearning.org>

# Ventures Initiative and Focus® System (K-12)

IN BRIEF	
Ventures Initiative and Focus System	
<b>Founder</b>	Ventures In Education, Inc.
<b>Current Service Provider</b>	Ventures Education Systems Corporation
<b>Year Established</b>	1981
<b># Schools Served (5/1/01)</b>	191
<b>Level</b>	K-12
<b>Primary Goal</b>	to raise students' academic performance
<b>Main Features</b>	<ul style="list-style-type: none"><li>development of students' communication/thinking skills</li><li>student-centered instruction</li><li>interdisciplinary project learning</li><li>a balanced approach to early literacy</li><li>literacy instruction for older students based on application of thinking skills</li></ul>
<b>Impact on Instruction</b>	transition to instruction that is student-centered, inquiry-based, project-based, arts-infused, and aligned with standards
<b>Impact on Organization/Staffing</b>	leadership training with a focus on student performance
<b>Impact on Schedule</b>	time required for professional development workshops, collaborative planning, and study
<b>Subject-Area Programs Provided by Developer</b>	yes (particularly science, math, and literacy)
<b>Parental Involvement</b>	parents apprised at beginning and end of year; parent(s) may be included in training cohort
<b>Technology</b>	integration of instructional methods and technology with content
<b>Materials</b>	provided by developer (e.g., books from various publishers, tapes, worksheets, monthly forms for measuring staff development progress)

## Origin/Scope

The Ventures Initiative and Focus Comprehensive Reform System was developed by Ventures In Education, Inc. Begun in 1981 as a funded program of the Josiah Macy, Jr. Foundation and established as an independent corporation in 1990, Ventures In Education has granted to its affiliate company, Ventures Education Systems Corporation (VESC), exclusive rights to market the Ventures Initiative and Focus system to schools. As of May 2001, VESC had worked with 191 schools.

## General Description

The goal of the Ventures Initiative and Focus system is to raise the academic achievement of minority and economically disadvantaged students so that they are performing at or above grade level and are well-prepared to enter the work force or pursue higher education upon graduation. This is accomplished by providing teachers with long-term staff development in

student-centered, inquiry-based instructional strategies that are fully integrated with content and aligned with national, state, and local standards.

The Ventures Initiative and Focus system is a synthesis of applied teaching and learning methods. Its step-by-step approach is designed to lead to more effective classroom management and school functioning. The system is based on research in the cognitive and neurological sciences. Specifically, the approach:

- Establishes an educational environment conducive to lifelong learning — by teaching students to communicate constructively and to work effectively together and alone
- Guides students to learn, master, and retain new information, to seek resolution of complex problems, and to complete interdisciplinary projects

- Provides a balanced literacy approach integrating phonological awareness and language-based literacy instruction for grades K-3, and structured thinking skills and content instruction for grades 4-12
- Aligns measurable goals for student performance and achievement with schoolwide curricula and instruction, as well as with national, state, and local content and performance standards, across all grade levels and academic disciplines
- Creates opportunities for school-to-job/career learning (through problem-based learning and project learning) as students interact with community members from a variety of fields
- Helps administrators learn to assess student performance on standardized tests so they can identify areas that require improvement
- Invites selected parents and community members to participate in staff development and offer their professional expertise in the classroom
- Helps senior administrators evolve from managers of day-to-day operations to facilitators of the change process and leaders in curriculum and instruction

## Results

In the 1980s, an earlier version of the Ventures program served selected students in 39 urban and rural high schools attended largely by poor and minority students. A study published by the McKenzie Group in 1990 reported that, among other positive findings, Ventures students scored considerably higher on the SAT than their same-race peers across the country. An interim report on more than 50 high schools involved in a Ventures in Science program from 1993-96 noted improvements across sites in students' math and science grades. A 1995 study of the first two years of the Walks of Life program, a New York City school-to-work program of which the Ventures Initiative and Focus system was a cornerstone, concluded that it was too early to discern significant differences between Walks of Life schools and comparison schools in students' math and reading performance.

Data from these and other sources show improvements in students' scores on a variety of standardized tests at individual Ventures schools. For example, at an Arkansas school, average ACT scores rose from 16 to 21 over a two-year period. After 11<sup>th</sup> grade teachers at an Alabama school had undergone Ventures training, 11<sup>th</sup> grade students outscored the prior year's cohort on the Stanford Achievement Test in reading comprehension and English by wide margins. The number of Regents exams passed by students at a high school in the Bronx increased by 146 percent over a five-year period.

Increases on other indicators (e.g., enrollment in Advanced Placement courses, graduation rate, college attendance, and acceptance into medical school) also suggest the impact the Ventures Initiative and Focus system has had on students.

## Implementation Assistance

- **Project Capacity:** VESC's New York City office includes a staff of 10 who supervise all planning, training, and onsite coaching activities for a network of close to 100 professional educators around the country. Each school's cohort of participating teachers and administrators is matched with a school-based trainer who lives in the vicinity.
- **Faculty Buy-In:** As a prerequisite for working with any school, VESC requires that the school leadership and a majority of the teaching staff are in support of such a partnership. VESC works collaboratively with the principal and leadership team from the creation of a

customized strategic plan and time line, through implementation, to completion of the contract.

- **Initial Training:** The initial component of the Ventures Initiative and Focus system is a +two-day staff development session for all participants, generally held at the school site. The session helps participants learn to establish an environment that eliminates negative communication and promotes constructive interaction and thinking. Effective techniques are demonstrated through experiential exercises that facilitate collaboration among students.
- **Follow-Up Coaching:** During the first year, the VESC staff developer makes at least five site visits to each teacher's classroom to ensure systematic transition from a traditional to student-centered approach. In addition, periodic review sessions are held. If a school contains a large teaching staff, VESC can prepare cohorts of teachers and administrators to serve as master trainers for the rest of the faculty.
- **Networking:** All VESC schools have shared their experiences with each other and serve as resources for schools just beginning the program. A VESC Web site is currently under development.
- **Implementation Review:** VESC's strategy for monitoring progress in implementation includes: a Strategic Plan/Blueprint for Implementation that describes the sequence of professional development activities for each year; the gathering of baseline data at the beginning of each school year, which is used as a yardstick to measure changes; monthly implementation forms completed and shared by school leaders; workshops on the item analysis of student performance on standardized tests; end-of-year meetings for self-evaluation; and interim and final reports prepared by VESC.

## Costs

Pricing includes on-site training workshops, training materials, in-class coaching days, and offsite support. Costs for implementing the Ventures Initiative and Focus system include the trainers, days, materials, and the time it takes to prepare, plan, train, implement, coach, and monitor the progress of implementation on-site and off-site.

For one cohort (with a maximum of 125 people), the average number of days in a year of professional development and training ranges from 25 to 30 at an average cost of \$45,000 to \$53,250 per cohort. The number of cohorts that can be trained at one time is unlimited.

VESC costs do not include meals, refreshments, or rental of off-site facilities if such are required. Since workshops are normally held during school hours and are generally full-day sessions, schools may incur per diem expenses to hire substitute teachers. If workshops are held after school or on weekends, schools may be required to pay stipends.

## Student Populations

VESC has worked with youngsters from culturally diverse, disadvantaged, and special populations in both urban and rural settings, as well as on the Navajo Reservation. The majority of students have been eligible for free or reduced-price lunch. Some of the published materials used by VESC for training in constructive communication and effective group process are available in Spanish.

## Special Considerations

Although data collected by VESC may be disseminated through reports, such reports will at no time identify by name the teachers or students involved.

## Selected Evaluations

### Developer

Ventures In Education, Inc. (1995). *Final report: Problem-based learning teacher training, West Alabama Ventures In Education (WAVE) for the grant period September 13, 1993-September 30, 1995*. New York: Author.

Ventures In Education, Inc. (1996). *Ventures In Science: Insuring opportunity now (V.I.S.I.O.N.)* (Interim report for NSF-sponsored grant HRD-93500545). New York: Author.

### Outside Researchers

Bailis, L. N. (1995). *Evaluation of Walks of Life: Second annual report*. Waltham, MA: Brandeis University.

McKenzie Group. (1990). *Expanding horizons: A vision for our high schools*. Washington, DC: Author.

McKenzie Group. (1994). *Expanding horizons: Success in high school and beyond*. Washington, DC: Author.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Miami Jackson Senior HS 1751 N.W. 36th Street Miami, FL 33142 305-634-2621 Contact: Louis Allen, Jr.	527	mid-size city	5%	10%	9%	33%	43%	76%	30%	17%
Christopher Columbus HS 925 Astor Place Bronx, NY 10469 718-231-5000 Contact: Gerald Garlin	3,449	large city	30%	<1%	8%	50%	11%	82%	16%	16%
Robinson Elementary School 5101 Burg Jones Lane Monroe, LA 71202 318-322-1784 Contact: Toreatha Chisley	453	urban fringe of mid-size city	98%	0%	0%	0%	2%	89%	0%	10%
Steve Garvey Junior High 310 North Harvard Lindsay, CA 93247 559-562-1311 Contact: Norman Campbell	506	urban fringe of mid-size city	<1%	<1%	2%	88%	9%	77%	75%	6%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

## For more information, contact:

Maxine E. Bleich, President  
Ventures Education Systems Corporation  
245 Fifth Avenue, Suite 802  
New York, NY 10016

Phone: 212-696-5717  
Fax: 212-696-5726  
E-mail: [mbleich@ventures.org](mailto:mbleich@ventures.org)

## **Reading/Language Arts Models**

## Breakthrough to Literacy (PreK-2)

IN BRIEF	
Breakthrough to Literacy	
<b>Founder</b>	Carolyn Brown and Jerry Zimmermann, University of Iowa
<b>Current Service Provider</b>	Breakthrough to Literacy/Wright Group/McGraw-Hill
<b>Year Established</b>	1981
<b># Schools Served (5/1/01)</b>	1,063
<b>Level</b>	preK-2
<b>Primary Goal</b>	teaching connection of oral language to print
<b>Main Features</b>	<ul style="list-style-type: none"><li>• daily story reading</li><li>• interactive computer software</li><li>• print materials to integrate computer curriculum</li><li>• children progress at their own pace</li></ul>
<b>Impact on Instruction</b>	suggested routine for 10-15 minutes of reading interaction and 15-20 minutes on the computer (in reading classes only)
<b>Impact on Organization/Staffing</b>	none
<b>Impact on Schedule</b>	none
<b>Parental Involvement</b>	parents are asked to read to their child and listen to the child "read" to them every night
<b>Technology</b>	computer software is provided; 2-3 computers and 1 printer per classroom are necessary
<b>Materials</b>	provided

### Origin/Scope

Breakthrough to Literacy was founded by Carolyn Brown and Jerry Zimmermann in 1981 at the University of Iowa. Since its initial implementation in Dallas public schools in 1994, Breakthrough (previously called Foundations in Reading) has been adopted in 1,063 schools.

### General Description

Breakthrough to Literacy focuses on teaching pre-kindergarten through second grade students to relate oral language and pictures to print. The program provides each child, at his or her level of language/literacy development, stories and access to direct and explicit instruction for phonemic awareness. This is achieved through the use of "big books," pupil books, and computer modules.

The typical Breakthrough classroom focuses on one big book per week (10-15 minutes per day). The book is read to the children every day with a different objective. On Monday, for example, the objective is introduction. The teacher introduces the author and illustrator and reads the book to the students. They discuss what they liked or disliked about it and then the teacher reads it again. On Tuesday, the objective is review. The teacher asks the children to recall what they learned the previous day and to role play based on the story's characters. Wednesday, integration is the focus. The children are asked to relate what they've learned to something in their own lives. And so on through Friday.

Children also spend 15-20 minutes per day at the computer making connections between what they have "read" and what they see on the computer screen, and vice versa. When the teacher chooses a new big book, the children have already seen those words on the computer several times. This combination of literature-based instruction and instructional technology is intended to help the children develop better phonemic awareness, enhance their vocabulary development, and promote an understanding of sound-symbol relationships. Children progress through the program at their own pace due to daily one-on-one sessions with teachers and computers. Additionally, parents are urged to read to their children and have stories "read" to them every night.

## Results

Breakthrough's impact on student achievement has been measured using a number of assessment tools. In 1995-96, Dallas kindergartners using the program tested 12-20% higher in vocabulary, word analysis, and math on the Iowa Test of Basic Skills (ITBS) than children in control schools. In 1997, kindergartners in Virginia tested 10-35% higher than controls in vocabulary, listening, and word analysis on the ITBS. Also in 1997, a San Francisco kindergarten class testing 8-14% higher than controls on a Yopp-Singer Test of Phonemic Awareness.

## Implementation Assistance

- **Project Capacity:** The developers are located at the University of Iowa. Training and support is provided by The Wright Group of Bothell, Washington.
- **Faculty Buy-In:** Principals, teachers, and superintendents attend a meeting to decide if they want to use the program. The teachers must have support from the district and administration in order for the program to be successful.
- **Initial Training:** Training begins with a two-hour overview for the principals. The teachers receive a full day of training to help them set up Breakthrough to Literacy in their classrooms. This session is scheduled immediately before implementation. Literacy coaches, who are located close to the implementation sites, join with the teachers on their first day of implementation.
- **Follow-Up Coaching:** Four weeks after implementation, teachers spend another full day of training learning how to further integrate Breakthrough to Literacy in their classrooms. Eight weeks after implementation, the teachers attend a final full-day session learning to interpret Breakthrough to Literacy reports and developing specific lesson plans.
- **Networking:** Breakthrough to Literacy supports a 1-800 hotline and publishes a quarterly newsletter.
- **Implementation Review:** The developers receive progress reports and data from the districts directly. They also employ an independent quality assurance firm to assess progress in some districts.

## Costs

Each classroom must have two to three computers and a printer. The computers need software that supports Breakthrough to Literacy software, which contains stories and over 4,500 lessons. Each classroom receives Big Books, six-packs of little books, and take-home books for each child. The estimated cost per classroom is approximately \$13,500. Most funding is provided at the district level; however, some grants are provided to get the program up and running in some schools.

## Student Populations

Breakthrough is designed particularly for low-income, inner-city, and rural students, including Title I children, although it has been used with children of all economic levels. A teacher in Texas uses Breakthrough as an ESL tool for his students.

## Special Considerations

Parents must be willing to play a role in their child's literacy development.

## Selected Evaluations

### *Developer*

No published evaluations available.

### *Outside Researchers*

No published evaluations available.

## Sample Sites

<i>School/Contact</i>	<i>Size</i>	<i>Locale</i>	<i>Race/Ethnicity</i>					<i>Free Lunch Elig.</i>	<i>ELL</i>	<i>Students with Disab.</i>
			<i>African Amer.</i>	<i>Am. Ind./ Alaskan</i>	<i>Asian Amer.</i>	<i>Hisp.</i>	<i>White</i>			
Suburban Park Elementary 210 Thole Street Norfolk, VA 23505 757-531-3118 Contact: Jan Root	522	large city	66%	<1%	2%	3%	29%	53%	1%	15%
Madison Park School (PreK-6) 851 Madison Avenue SE Grand Rapids, MI 49507 616-771-2785 Contact: Kurt Johnson	381	mid-size city	90%	<1%	<1%	9%	<1%	90%	<1%	4%
Live Oak Elementary 1916 Capitola Road Santa Cruz, CA 95602 831-475-2000 Contact: David Paine	466	urban fringe of large city	4%	1%	4%	36%	54%	9%	24%	14%
North Graham Elementary School 1025 Trollinger Road Graham, NC 27253 336-578-2272 Contact: Meg Sheehan	325	rural	42%	<1%	<1%	10%	46%	54%	18%	2%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

## For more information, contact:

Julia Wasson Render  
 Breakthrough to Literacy, Inc.  
 2662 Crosspark Road  
 Coralville, IA 52241  
 Phone: 800-874-2851  
 Fax: 319-665-3014  
 E-mail: [julia\\_render@mcgraw-hill.com](mailto:julia_render@mcgraw-hill.com)  
 Web site: <http://www.earlyliteracy.com>

## Carbo Reading Styles Program (K-8)

IN BRIEF	
Carbo Reading Styles Program	
<b>Founder</b>	Marie Carbo
<b>Current Service Provider</b>	National Reading Styles Institute
<b>Year Established</b>	1975
<b># Schools Served (5/1/01)</b>	32 comprehensive sites
<b>Level</b>	K-12
<b>Primary Goal</b>	to increase literacy by matching reading instruction to the student's preferred style of reading
<b>Main Features</b>	<ul style="list-style-type: none"><li>teachers diagnose students' strengths and accommodate them with a range of effective reading strategies</li><li>Carbo Recorded-Book Method</li><li>comfortable, relaxed settings</li><li>individual and small group work</li></ul>
<b>Impact on Instruction</b>	see Main Features
<b>Impact on Organization/Staffing</b>	program is facilitated through teacher teams, teacher pairs that coach one another, mentor teachers for new teachers, and (sometimes) an on-site Reading Styles facilitator
<b>Impact on Schedule</b>	many Reading Styles schools use block scheduling to facilitate cooperative planning
<b>Parental Involvement</b>	strongly encouraged
<b>Technology</b>	none required, although the Reading Styles Inventory must be scored on computer
<b>Materials</b>	Reading Style Inventory, colored overlays, Carbo Recorded Books, tape recorders, listening centers, headsets, audio cassettes audio cassette dubbing machine, and laminating machine

method is best for every child, since children's individual strengths and interests vary widely. Consequently, teachers must master a wide range of reading strategies so that their reading program accommodates their students' varying reading styles. For example, many poor readers are global, tactile, kinesthetic learners. An ideal reading program for these youngsters would include large amounts of activity and holistic reading methods (e.g., choral reading, echo reading, recorded books).

To implement the program, RSP requires schools to use several key materials and strategies, including the Reading Style Inventory (RSI) and the Carbo Recorded-Book Method. The RSI provides teachers with a compact profile of a student's key strengths and weaknesses. It lists the top reading methods, materials, and strategies to best meet the student's instructional needs. The RSI also provides teachers with a three-page, in-depth profile of a student.

The Carbo Recorded-Book Method is an integral part of RSP. After identifying books or reading materials of high interest to students, the teacher divides the materials into small segments. These segments are recorded onto a tape cassette in short phrases at a slightly slower

### Origin/Scope

The Carbo Reading Styles Program was developed in 1975 by Marie Carbo, founder of the National Reading Styles Institute. As of May 2001, the program had been implemented comprehensively in 32 schools. Thousands of other schools have implemented it at a basic level.

### General Description

The philosophy behind the Carbo Reading Styles Program (RSP) is to increase student literacy by making the process of learning to read so easy and enjoyable that students become motivated, confident, fluent readers in short periods of time. Research conducted by Carbo and her colleagues indicates that students have different learning styles for reading — or "reading styles" — that predispose them to learn far more easily with particular reading techniques.

Therefore, no single reading

speed than normal. The student listens repeatedly to the recording, later reading the passage aloud to the teacher. Carbo believes the recordings enable "any student to read immediately" and help to build a child's confidence. Also, students are reading something they find genuinely interesting.

## Results

Studies show that RSP has resulted in high gains in student reading achievement scores, especially with students in the bottom third. Student achievement has been measured by standardized achievement tests, performance-based assessments, teacher and student attitude surveys, and teacher records. A 10-district national study of grades 1-9 conducted over two years (1992-94), published by Phi Delta Kappa in 1998, indicates that when schools implement RSP at the 85% level the result is "consistently higher achievement scores and gains than children in the control program." Doctoral research indicates that at-risk students made 100%-200% higher gains with RSP than those made by students in control groups. Other studies show increased motivation among students to read on their own in the classroom and at home.

## Implementation Assistance

- **Project Capacity:** RSP utilizes a core group of full-time trainers and 30 part-time trainers.
- **Faculty Buy-In:** Teachers and administrators must possess a strong desire to improve their school's reading program. While it is possible for a single teacher to implement RSP at a high level, whole-building commitment brings higher levels of student success. A 75% staff buy-in is required for the comprehensive program.
- **Initial Training:** A five-day training package is available, with additional days of technical assistance as requested by schools. Technical assistance includes team building, coaching, principal support, consultation, evaluation, follow-up training and demonstration lessons.
- **Follow-Up Coaching:** RSP trains one or more in-district reading styles facilitators to serve as ongoing support for the program.
- **Networking:** RSP offers regional seminars, an annual national conference, a Web site (including a discussion forum) and a quarterly national newsletter.
- **Implementation Review:** The Degree of Reading Styles Implementation Checklist is the governing document in schools that implement RSP. This detailed checklist allows faculties to measure their implementation of RSP with those characteristics that have been proven to result in effective programs. The checklist may be used as a self-check or as part of an outside evaluation of the program.

## Costs

Comprehensive program fees for year one are approximately \$50,000 to \$55,000 for 30 teachers, plus \$975 per additional teacher for training and materials. The fee for additional non-classroom participants is \$500 per person. Fees for years two and three are approximately \$35,000 to \$40,000 for 30 teachers, plus \$650 per additional teacher.

Year one fees cover classroom and training materials, four days of training, seven days of technical assistance, and evaluation. Building teams (principal, facilitator, two teacher representatives) also receive two days of implementation training, registration for the National Reading Styles Conference, and a visit to a model school. Fees for years two and three include training, technical assistance, materials, and registration for the National Reading Styles

Conference for 10 staff members. Schools should allow an additional \$10,000 to \$15,000 per year for conference travel expenses, model school visitation, substitutes, and equipment.

## Student Populations

RSP works with all students, but the majority of students are minorities from low income communities.

## Special Considerations

The RSP program requires the following resources: Reading Style Inventory materials (test booklets and disks), Carbo Recorded Books, one listening center per classroom, one good-quality tape recorder for every five teachers, at least three to five tape players with headsets per classroom, at least 100 blank tape cassettes per classroom, one RSP Overlay Kit per classroom. Teachers are also encouraged to create comfortable reading environments for students; for example, many RSP teachers have brought couches and pillows into the classroom.

## Selected Evaluations

### Developer

Barber, L., Carbo, M., & Thomasson, R. (1998). *A comparative study of the reading styles program to extant programs of teaching reading*. Bloomington, IN: Phi Delta Kappa.

### Outside Researchers

LaShell, L. (1986). *An analysis of the effects of reading methods on reading achievement and locus of control when individual reading style is matched for learning-disabled students*. Doctoral dissertation, Fielding University.

Skipper, B. (1997). Reading with style. *American School Board Journal*, 184(2): 36-37.

Sudzina, M. (1993). *An investigation of the relationship between the reading styles of second-graders and their achievement in three basal reader treatments*. (ERIC Document Reproduction Service No. ED 353 569)

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
O'Connor Elementary 3402 Bobolink Victoria, TX 77901 361-788-9572 Contact: Sherry Gorsuch	704	mid-size city	12%	0%	0%	72%	15%	62%	8%	13%
Livingston Primary (K-2) 1200 Mill Ridge Road Livingston, TX 77351 936-328-2160 Contact: Janel Poindexter	928	small town	14%	1%	1%	11%	73%	53%	13%	10%
Jeannette Myhre Elementary 919 South 12 Street Bismarck, ND 58504 701-221-3430 Contact: Bill Demaree	433	mid-size city	1%	16%	1%	0%	82%	44%	5%	21%

Oakland Heights Elementary 601 59th Avenue Meridian, MS 39307 601-484-4984 Contact: Kim Benton	477	large town	74%	0%	0%	0%	26%	63%	1%	4%
--	-----	------------	-----	----	----	----	-----	-----	----	----

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

## For more information, contact:

Marian S. Gordon  
 Carbo Reading Styles Program  
 PO Box 737  
 Syosset, NY 11791  
 Phone: 800-331-3117 or 516-921-5500  
 Fax: 516-921-5591  
 E-mail: [nrsi@mindspring.com](mailto:nrsi@mindspring.com)  
 Web site: <http://www.nrsi.com>

## CELL/ExLL (PreK-6)

IN BRIEF CELL/ExLL (California Early Literacy Learning/ Extended Literacy Learning)	
<b>Founder</b>	Stanley L. Swartz, Rebecca E. Shook, and Adria F. Klein of the Foundation for California Early Literacy Learning
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1994
<b># Schools Served (6/1/00)</b>	527
<b>Level</b>	CELL PreK-3, ExLL 3-6
<b>Primary Goal</b>	professional development to support increased student achievement in literacy and content areas
<b>Main Features</b>	<ul style="list-style-type: none"><li>increase emphasis on reading and writing across the curriculum</li><li>provide extensive professional development for teachers</li><li>use a balanced reading and writing program supported by research</li><li>align teaching methods within and across grades</li><li>support English language learners and facilitate inclusion of special needs children</li></ul>
<b>Impact on Instruction</b>	alignment of curriculum and instruction across grades; use of reading framework
<b>Impact on Organization/ Staffing</b>	increased priority to professional development and team building
<b>Impact on Schedule</b>	none
<b>Parental Involvement</b>	a special family literacy component is included
<b>Technology</b>	no special technology is required
<b>Materials</b>	readings for teachers; professional reading list; list of recommended instructional materials

### Origin/Scope

California Early Literacy Learning (CELL) and Extended Literacy Learning (ExLL) were developed in 1994 by the Foundation for California Early Literacy Learning. The purpose is to provide extensive professional development for teachers to support improved literacy instruction. Over 500 schools have participated since the project's inception.

### General Description

CELL (PreK-3) and ExLL (3-6) organize research-based teaching methods into a framework for classroom instruction. The framework covers oral language, phonological skills, reading aloud, shared reading, guided reading, independent reading, interactive writing, independent writing, and oral presentation. Primary-grade teachers are encouraged to teach all subjects using the framework. Intermediate teachers focus on reading and writing in the content areas while recognizing that some children in these grades are still struggling readers.

CELL and ExLL emphasize skills development (e.g., phonemic awareness, explicit phonics instruction, word-attack skills, and spelling) within the context of high-quality literature and authentic reading and writing activities. Teachers learn a variety of assessment procedures that inform classroom instruction and focus attention on the needs and strengths of individual children. High-progress children are encouraged to continue their rapid growth. Low-progress children are provided continuous support and multiple opportunities to practice new strategies in a risk-free environment. As each student's grasp of literacy improves, the models encourage a gradual increase in student independence.

CELL/ExLL teaching methods are aligned within and across grades for both regular and special education, thus facilitating the inclusion of special needs children. Standardized test scores for each participating school are monitored, both in language arts and other content areas.

In addition, at the beginning of the school year, approximately six children chosen at random from each classroom are individually assessed. The same group takes a posttest at the end of the year, allowing schools to monitor learning at each grade level.

## Results

Data from selected schools, while not gathered as part of methodologically rigorous evaluations, suggest a pattern of improved reading achievement across a variety of measures in schools adopting CELL/ExLL. For example, from 1992-93 through 1994-95, six Title I schools using Reading Recovery recorded minimal improvements in first-grade CTBS reading scores. After the first year of CELL implementation in 1995-96, the average score across the six schools increased from the 28<sup>th</sup> to the 45<sup>th</sup> percentile. At another Title I school implementing CELL, students in grades K-2 all improved their grade-equivalent scores on the Observation Survey by considerably more than a year from fall to spring. The second-grade class made over two years' improvement. From 1992-93 through 1994-95, four schools using CELL and Reading Recovery witnessed a drop in special education referrals from 3.2 percent of students to 1.5 percent. Over the same period, referrals at three comparison schools using just Reading Recovery stayed level, and referrals at three comparison schools using neither program rose from 3.2 percent to 3.7 percent.

Other data indicate that schools implementing CELL/ExLL to the fullest extent improve more than schools with partial implementation. Additionally, mathematics scores at some CELL/ExLL schools have risen along with reading scores.

## Implementation Assistance

- **Project Capacity:** The Foundation for California Early Literacy Learning, located in Redlands, California, maintains a staff of 13, including 10 full-time trainers. Another 50 part-time trainers are also available for working with schools.
- **Faculty Buy-In:** CELL and ExLL require no formal expression of faculty commitment. It is expected, however, that faculty and administration will reach a consensus before adopting the model.
- **Initial Training:** CELL and ExLL implementation have three phases: (1) A School-Based Planning Team (principal, reading specialist, special education teacher, and one teacher from each grade) participates in six one-day training sessions — one every other month. The teachers begin implementing the CELL/ExLL framework after the first session and receive feedback at subsequent sessions. This format allows schools to begin partial implementation and develop a resource for observation, demonstration, and support. The whole team also works together during the training days to develop a vision for future literacy instruction in their school. (2) A Literacy Coordinator is trained to support CELL/ExLL implementation and serve as a coach. Coordinators attend five week-long training sessions over the school year. They teach half-time and spend the rest of their time observing and working with teachers. (There is separate training for CELL and ExLL literacy coordinators.) (3) Schoolwide implementation begins. Teachers who were not part of the planning team receive training similar to that received by the planning team. They also visit a CELL/ExLL site at least three times. This phase can begin during the second or third year of implementation, depending on whether the first two phases proceed concurrently or consecutively.
- **Follow-Up Coaching:** The three-phase training model is designed explicitly to build

capacity for demonstration, feedback, peer coaching, and sustained learning at the school site. The literacy coordinator supports the planning team, and both the coordinator and planning team members support other teachers in the school. Between training sessions teachers participate in bi-weekly guided meetings. After the first year, literacy coordinators continue to attend three professional development days annually for networking and program updates.

- **Networking:** As part of their initial training, all teachers attend either the West Coast Literacy Conference or a regional CELL/ExLL conference.
- **Implementation Review:** A professional review is conducted each year with the principal and the literacy coordinator. On-site reviews by CELL/ExLL training staff also are available.

## Costs

Direct costs include training, materials, and conference fees:

<b>School-based planning teams:</b> eight member maximum per team; six one-day sessions (one every other month) provided at multiple sites across the U.S.	\$5,000
<b>Literacy coordinator:</b> four weeks scheduled at CELL demonstration sites (in California, Wyoming, and Utah); one week at the West Coast Literacy Conference	\$12,000
<b>Schoolwide training:</b> entire teaching staff; six one-day sessions (one every other month) provided at multiple sites across the U.S.	\$45,000 (\$15,000 per school if a minimum of 3 schools train together)
<b>Professional books</b>	\$300 per teacher
<b>Literacy conference</b>	\$195 per teacher

Schools also have to fund the literacy coordinator's salary (half-time) and travel and release time for teachers to attend training sessions. For schools adopting both CELL and ExLL, two literacy coordinators are required, one for the primary grades and one for the intermediate grades. In smaller schools it is possible for one literacy coordinator to support PreK-6, but this requires additional training.

## Student Populations

The model has been successfully implemented in Title I, urban, and rural schools. It is designed to support English language learners in several ways. Some books on the recommended list are available in English and Spanish. Bilingual trainers and literacy coordinators participate in training sessions. Staff at CELL/ExLL schools have the opportunity to visit bilingual demonstration sites. And a bilingual pilot site has been developed in Mexico City.

## Special Considerations

Because of the in-depth professional development built into the model, schools must be willing to support considerable release time and some travel for teachers.

## Selected Evaluations

### Developer/Implementer

Data gathered by staff at CELL/ExLL schools and districts are collected in the following document:

*California Early Literacy Learning/Extended Literacy Learning.* (2000). Redlands, CA: Foundation for California Early Literacy Learning.

### Independent Researchers

No studies available.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Parkview Elementary 12044 East Elliott Avenue El Monte, CA 91732 626-575-2297 Principal: Anamarie Sanchez	1,091	urban fringe of large city	1%	0%	4%	94%	1%	92%	84%	16%
Roscoe Elementary School 10765 Strathern Street Sun Valley, CA 91352 818-767-3018 Principal: Mary Kurzeka	1,045	large city	1%	<1%	4%	92%	4%	100%	82%	12%
Sagebrush Elementary 1685 Hillpond Sheridan, WY 88201 307-672-9059 Literacy Coordinator: Charlene Huntley	324	small town	0%	4%	1%	5%	90%	47%	0%	16%
Whittier Elementary School 1568 South 300 East Salt Lake City, UT 84115 801-481-4846 Principal: Patti O'Keefe	527	mid- size city	5%	10%	9%	33%	43%	76%	30%	17%

The data in this table are reported for the 1999-2000 school year.

## For more information, contact:

The Foundation for California Early Literacy Learning  
104 East State Street, Suite M  
Redlands, California 92373  
Phone: 909-335-3089  
Fax: 909-335-0826  
E-mail: [amie\\_macpherson@cell-exll.com](mailto:amie_macpherson@cell-exll.com)  
Web site: <http://www.cell-exll.com>

## CORE (Consortium on Reading Excellence): K-8

IN BRIEF	
Consortium on Reading Excellence (CORE)	
<b>Founder</b>	CORE, Inc.
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1995
<b># Schools Served (6/1/00)</b>	192
<b>Level</b>	K-8 (9-12 under development)
<b>Primary Goal</b>	to improve student reading achievement through research-based practices
<b>Main Features</b>	<ul style="list-style-type: none"><li>use of scientific research to drive reading instruction</li><li>extensive literacy training including strategies, model lessons, coaching, and collegial reflection</li><li>explicit skills instruction and language- and literature-rich activities</li><li>ongoing assessment system and design of instructional interventions</li></ul>
<b>Impact on Instruction</b>	direct instruction (to whole class and groups) and student-centered activities; systematic code instruction, rich literature, and comprehension; assessment-driven decisions; some regrouping of students
<b>Impact on Organization/Staffing</b>	schools encouraged to release at least one teacher half-time to serve as facilitator, and to provide time for full-staff collaboration
<b>Impact on Schedule</b>	K: 60-90 minutes daily; grades 1-3: 2-2 1/2 hours for all language arts; grades 4-6: 2 hours; grades 7-8: 2 periods desirable
<b>Parental Involvement</b>	parent workshops and materials
<b>Technology</b>	e-mail and Internet desirable
<b>Materials</b>	books on reading research, instruction, and assessment for all teachers; recommended texts and materials for students

Training focuses on practices that scientific research has shown to be effective in helping children become readers: phonemic awareness development, understanding of the alphabetic principle, phonics, automatic word recognition and fluency, spelling and vocabulary skills, comprehension strategies, text structure analysis, assessment and differentiation of instruction, wide reading, and book discussions. Teachers learn a repertoire of strategies that combine explicit skills instruction with rich literature, along with multiple ways to track student progress and diagnose needs.

In addition to providing professional development, CORE helps schools make systemic changes to increase the capacity for ongoing success without prolonged outside assistance. Services include assistance in (a) developing school and district leadership to support reform; (b) planning, implementing, and maintaining a comprehensive schoolwide literacy program; (c)

### Origin/Scope

The Consortium on Reading Excellence (CORE) was developed in 1995 by Bill Honig, Linda Diamond, and other school reformers and reading researchers. To date CORE has trained teachers in 600 schools and 70 school districts in California, Idaho, Oregon, and Washington. Of that number, 29 districts have participated in sustained implementation, and 192 schools have committed to comprehensive reading reform.

### General Description

CORE's purpose is to improve student achievement in reading and increase teacher efficacy through the use of scientific research and best practices. To that end, the organization provides extensive professional development for grades K-3 and 4-8. The complete CORE model involves six days of training for all staff, regular site visits, classroom demonstrations, leadership and facilitator training, coaching, and collegial reflection.

designing an intensive intervention and tutoring program for students who need more support; and (d) selecting reading materials.

In turn, the school must agree to:

- Focus on literacy in general and on reading specifically, presenting students with systematic and explicit decoding skills as well as the language- and literature-rich activities associated with whole language
- Base practice on a solid foundation of reading research
- Track data on student performance
- Pursue high standards and accountability based on results
- Coordinate resources in support of student literacy

Current school operations will be restructured as necessary in pursuit of CORE's fundamental goal: that all students will learn to read fluently, enjoy reading, and use reading as a tool for further learning.

## Results

An external evaluator has been examining data on all CORE sites in California since 1998. The data demonstrate a number of advantages on SAT 9 reading scores for CORE districts compared with the state as a whole. For example, from 1998-99, the percentile growth for second graders in 25 CORE districts (involving almost 32,000 students) was 7.5, almost twice the 4.0 percentile growth statewide. CORE third graders achieved a 5.5 percentile growth, compared with a 3.0 percentile growth statewide. Preliminary analysis of second-grade scores for 22 districts that continued CORE training through the year 2000 shows that 20 of them achieved a greater percentile growth than the statewide average of 9 percentile points. The range for the 20 CORE districts was from 10 to 36 points.

In Oakland, a CORE elementary school was matched with a demographically similar comparison school. From 1998 to 1999, second, third, and fourth graders at the CORE school achieved percentile growths of, respectively, 7, 10, and 32 points. In the comparison school the corresponding changes were -1, 9, and 8 points.

No data are available for schools implementing CORE in grades six through eight.

## Implementation Assistance

- **Project Capacity:** CORE's national headquarters are in Emeryville, California, with a satellite center in eastern Washington and a Southern California office. Seven full time instructors are available to serve schools, along with 31 part-time staff. A pool of 5-10 teachers are on call in CORE schools. Each year CORE hires 3-4 new instructors.
- **Faculty Buy-In:** CORE requires an 80 percent vote of the teaching and administrative staff and commitment to full implementation. Included is the expectation that the building principal and identified teacher facilitator will provide committed leadership while supporting teacher growth and buy-in.
- **Initial Training:** CORE provides six days of formal training to all school staff, broken into primary and upper for large staffs or combined for smaller ones. Prior to implementation, CORE conducts a conference with key school stakeholders and presents the Day One overview to staff. Staff vote, participate in a session with CORE senior staff and the National Reform Director to tailor the model, and participate in the next two to three days of the professional development series. Then the remaining training for teachers is scheduled. CORE also provides a two-day leadership summit for the principal

and up to three teacher facilitators, and a five-day institute for up to two facilitators. Each school is strongly encouraged (though not required) to release at least one facilitator from half- to full-time so he or she can receive extra training and gradually assume responsibility for on-site coaching.

- **Follow-Up Coaching:** CORE instructors provide five to nine site visits over the first year, eight during the second year, and two to three the third year. During site visits, instructors demonstrate lessons, observe and coach teachers, solve problems with teachers, and analyze student assessment data. They also work with the site facilitator to prepare him or her to begin supporting teachers by the third year.
- **Networking:** CORE provides an annual leadership summit for leadership teams (principals and facilitators) from all full implementation schools. The summits showcase school successes, and school teams provide focused sessions for their colleagues. CORE also plans to host a listserv and chat room. In addition, facilitators from all schools participate in annual certification and re-certification seminars.
- **Implementation Review:** CORE staff monitor implementation using an observation tool and provide summaries from each site visit. Each school also receives a comprehensive implementation and system-monitoring packet that includes focus group questions for annual self-study, teacher pre- and post-surveys of knowledge and beliefs, observation surveys focusing on classroom implementation, and benchmarks over three years in each literacy component. Conferences are arranged to discuss progress and make adjustments.

## Costs

Costs for training and teacher materials average about \$50,000 the first year for an elementary school of 500 students. Including partial release time (0.5 FTE) for a facilitator and curriculum materials recommended by CORE (which average between \$400 and \$700 per K-3 class and \$700 for intervention materials for intermediate grades), first-year costs average about \$80,000, second year costs \$50,000, and third year costs \$25,000. If two or more sites within a district adopt CORE, costs for each site can be reduced by almost half. Schools also will have to budget for travel for CORE staff and stipends/release time for all staff members to participate in training.

Middle school costs average about \$37,000 the first year for a school of 500, not including travel, staffing, release time, or materials (which average about \$700 per grade).

## Student Populations

CORE has been implemented in a range of schools including urban, suburban, and rural schools, Title I schools, affluent schools, schools serving large numbers of English language learners and disadvantaged students, and schools with diverse ethnic populations.

## Special Considerations

It is critical that building leaders be committed to change, to supporting teachers during the change process, and to helping staff and students remain focused. Students with disabilities need to be included in regular classrooms as much as possible but also must have targeted instruction to meet their needs. Some of this instruction will take place in the regular program, some in small direct-instruction groups, and some in one-on-one tutoring sessions. CORE has a tutoring design in development.

## Selected Evaluations

### Developer/Implementer

No studies available.

### Independent Researchers

Qi, S. (2000). *Evaluation for CORE literacy instructional training*. Unpublished manuscript. Includes (a) data on CORE schools in California compared to schools statewide, (b) data from a CORE school and comparison school in Oakland, (c) data on student growth in phonological awareness from three California elementary schools, and (d) data from an elementary school in Oregon.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Boise Eliot Elementary 620 North Fremont Street Portland, OR 97227 503-916-6171 Principal: Eileen Isham	696	large city	47%	3%	3%	8%	40%	54%	8%	13%
Rock Island Elementary 5645 Rock Island Road Rock Island, WA 98850 509-884-5023 Principal: Bev Baugh	236	rural	2%	2%	2%	42%	53%	77%	38%	8%
Sacajawea Elementary 1710 North Illinois Avenue Caldwell, ID 83605-2110 208-455-3333 Contact: Margo Healy	587	urban fringe of mid- size city	0%	0%	0%	52%	48%	51%	52%	5%
Soap Lake Elementary PO Box 908 Soap Lake, WA 98851-0158 509-246-1323 Contact: John Adkins	288	rural	0%	5%	0%	20%	75%	75%	36%	10%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

## For more information, contact:

Linda Diamond or Joanne Lauer  
CORE, Inc.  
5855 Christie Avenue, Suite A  
Emeryville, CA 94608  
Phone: 510-595-3400 or 888-249-6155  
Fax: 510-595-3434  
E-mail: [info@coreread.com](mailto:info@coreread.com)  
Web site: [www.corelearn.com](http://www.corelearn.com)

## Early Intervention in Reading (K-4)

IN BRIEF	
Early Intervention in Reading	
<b>Founder</b>	Barbara Taylor, University of Minnesota
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1989
<b># Schools Served (5/1/01)</b>	214
<b>Level</b>	K-4
<b>Primary Goal</b>	to help struggling readers become competent and independent in reading
<b>Main Features</b>	<ul style="list-style-type: none"><li>• daily reading and writing sessions for small groups of struggling students</li><li>• focus on strategies and independence</li><li>• phonemic awareness training (K-2)</li></ul>
<b>Impact on Instruction</b>	builds the capacity of classroom teachers to provide effective reading instruction to all students
<b>Impact on Organization/Staffing</b>	none
<b>Impact on Schedule</b>	20 minutes of daily instruction to groups of 5-7 students
<b>Parental Involvement</b>	parents are asked to listen to their child read at home
<b>Technology</b>	Internet capability strongly recommended
<b>Materials</b>	training notebook; assessment materials; curriculum materials to support school-purchased books

- coaching for comprehension
- guided sentence writing to enhance phonemic awareness and understanding of the alphabetic principle
- coaching on the use of word recognition strategies to foster independence
- one-on-one reading practice

The third and fourth grade component involves a five-day cycle of activities, including repeated reading, decoding multi-syllabic words, coaching for comprehension, and writing to enhance comprehension. Students in the grade three or four program also serve as one-on-one reading buddies to first or second grade EIR students once a week.

The kindergarten program focuses on children's enjoyment of literature; discussion of stories related to their lives; creative dramatics; and development of phonemic segmentation and blending, rhyme, concepts of print, and letter-sound knowledge.

### Origin/Scope

Early Intervention in Reading (EIR) was developed in 1989 by Barbara Taylor of the University of Minnesota. Since that time over 200 schools in Minnesota and throughout the country have used EIR with over 11,500 struggling readers in grades K-4.

### General Description

EIR is a daily, 20-minute small group supplemental reading program taught by the classroom teacher to a group of five to seven struggling readers. The goal of the program is to have students become confident and independent readers.

In grades one and two this program involves a three-day cycle of activities including:

- repeated reading of a story
- working with words/phonics instruction
- phonemic awareness training

## Results

A study of four early-reading programs implemented in 27 elementary schools in a Massachusetts school district concluded that students receiving EIR instruction outperformed students receiving instruction in the other three methods on all seven measures developed for the study. The measures addressed letter name identification, letter sound identification, segmenting sounds, blending sounds, dictation skills, production of additional words, and word reading skills.

In two smaller studies, students in the EIR program outperformed students in control groups. In one study, conducted in the early 1990s, 67 percent of low achieving first-graders who participated in EIR were reading at least at a pre-primer level at the end of the year, compared with 36 percent of low achieving students in the control group. In the second study (1994-95 school year), 9 of the 12 second-grade students participating in EIR (which in this case included a cross-age tutoring program) were able to read second-grade material with at least 90 percent word recognition accuracy; none of the 12 students in the control group could do so.

Additionally, data collected across numerous urban, suburban, and rural districts (involving more than 100 schools) over an eight-year period reveal that on average 80 percent of first grade children in the EIR program are reading independently at the end of first grade and reading on grade level in second grade. On average, 80 percent of second grade children in EIR who enter second grade reading below a primer level are reading on a second grade level by the end of second grade. Results in schools where 70-90 percent of children participate in the subsidized lunch program indicate that after one year of using EIR, 55 percent of at-risk first graders are reading well by the end of first grade and 55 percent of second grade students who come to grade two not yet reading at primer level are reading at grade level by the end of second grade. EIR has been used extensively with second language (especially Hmong) students with good results: 75% of students reading independently at the end of first grade.

## Implementation Assistance

- ***Project Capacity:*** Training and support is provided during the school year by an EIR trainer. For the 1999-2000 school year, four trainers will be available, each of whom can work with 10 district cohorts of 36 teachers. Trained EIR teachers also can lead monthly discussion groups and become trainers for new school districts. Participating schools/districts are expected to designate a local site coordinator to act as liaison between the school and the EIR trainer.
- ***Faculty Buy-In:*** Information sessions both at the University of Minnesota and off-site are provided by the developer. No formal buy-in is required, but participating teachers must commit to attending once-a-month training sessions during the first year of the program and to implementing the program during the school year.
- ***Initial Training:*** EIR offers two staff development options for participating teachers, one following a more traditional approach with an introductory workshop and follow-up sessions, the second utilizing the Internet for follow-up. For option one, all teachers participate in a one-day introductory training session prior to beginning the program. A training notebook containing readings, procedures, assessments, teaching materials, and take-home activities related to the EIR program is provided to all participants. Under the second option, a school or district facilitator attends a two-day workshop in Minneapolis to learn how to use the Internet-based staff development program. The training notebook can be downloaded or purchased under this option.

- **Follow-Up Coaching:** Under option one, continued training and support includes monthly training meetings either in person or via conference calls plus from 1 to 10 onsite visits by the EIR trainer for observation and support of classroom teachers. Under the second option, the facilitator leads the group through the Internet program at monthly training meetings, which end with a conference call with the EIR trainer. In the fall, an EIR trainer makes a two-day onsite visit to the school or district. (A winter visit also can be arranged.) Under both options, a teacher-training-teachers model of staff development allows districts to assume responsibility for their training over a three-year period. An annual reunion workshop is held for teachers who have received EIR training.
- **Networking:** EIR provides on-going professional development support through its Web site and discussion site within the Web site.
- **Implementation Review:** Through onsite visits the EIR trainer observes implementation of the various components of the program. The local onsite coordinator is also in contact with the EIR trainer to report site concerns and questions. All teacher participants are required to complete a spring questionnaire on the effectiveness of the program.

## Costs

A site can have from 5 to 30 individuals participating in the year-long professional development program delivered via the Internet with support from an EIR trainer. The cost of implementing EIR is \$525 per teacher. An initial on-site visit from an EIR trainer can be arranged for an additional cost. Books used in the delivery of the program are purchased separately.

## Student Populations

EIR has been implemented in urban, suburban, and rural schools. It has been used extensively with second language learners, showing good results with Hmong students.

## Special Considerations

None.

## Selected Evaluations

### Developer

Taylor, B. M. (1995). *The early intervention in reading program: Results and issues spanning six years*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Taylor, B. M., Hanson, B., Justice-Swanson, K., & Watts, S. (1997). Helping struggling readers: Linking small-group intervention with cross-age tutoring. *The Reading Teacher*, 51, 196-208.

Taylor, B. M., Short, R. A., Frye, B. J., & Shearen, B. A. (1992). Classroom teachers prevent reading failure among low-achieving first-grade students. *The Reading Teacher*, 45, 592-597.

### Outside Researchers

Chard, D. J. (1997). *Final evaluation report AY 1996-1997 Early Reading Intervention Project: Springfield Public Schools, Springfield, Massachusetts*. Austin: University of Texas.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Webster Open School (K-8) 425 5th Street NE Minneapolis, MN 55413-2117 612-668-0800 Contact: Judy Parezek	800	large city	27%	3%	31%	12%	27%	83%	40%	9%
Staples Elementary 1025 NE 4th Street Staples, MN 56479 218-894-2433 Contact: Rynell Schock	600	rural	1%	1%	0%	1%	97%	60%	2%	15%
Sunnyside Elementary School 2070 County Road H New Brighton, MN 55112 651-784-5226 Contact: Ceil Critchley	540	urban fringe of large city	10%	2%	4%	4%	80%	32%	5%	10%
Clinton Public Schools 10 School Street Clinton, NJ 08809 908-735-8512 Contact: John Haney	576	small town	3%	0%	0%	0%	97%	1%	0%	16%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

### For more information, contact:

Barbara Taylor or Patti Osman  
Early Intervention in Reading  
1517 Goodrich Avenue  
St. Paul, MN 55105  
Phone: 651-261-9790  
Fax: 651-698-9405  
E-mail: [bmtaylor@umn.edu](mailto:bmtaylor@umn.edu)  
Web site: <http://www.eireading.com>

## Exemplary Center for Reading Instruction (K-12)

IN BRIEF	
Exemplary Center for Reading Instruction	
<i>Founder</i>	Ethna R. Reid
<i>Current Service Provider</i>	same as founder
<i>Year Established</i>	1966
<i># Schools Served (5/1/01)</i>	2,498
<i>Level</i>	K-12 (with primary focus on K-8)
<i>Primary Goal</i>	teach students to read, write, listen, and speak so they can communicate effectively
<i>Main Features</i>	<ul style="list-style-type: none"><li>• mastery learning approach to language arts instruction</li><li>• individualized instruction</li><li>• emphasis on expressive skills (writing and speaking) as well as receptive skills (reading and listening)</li><li>• applications to other content areas</li></ul>
<i>Impact on Instruction</i>	three daily instructional components: skills, practice, and backup skills; considerable time devoted to small group and individualized instruction
<i>Impact on Organization/Staffing</i>	educators evaluate possible redeployment of current staff
<i>Impact on Schedule</i>	educators evaluate current schedules and use of time
<i>Parental Involvement</i>	ECRI materials address parent involvement
<i>Technology</i>	no new technology required
<i>Materials</i>	20 teacher texts required; teaching materials and mastery tests that correspond to student textbooks are provided

Using reading materials currently in place at the school, ECRI-trained teachers follow dialogues, or scripts, as they move students through three daily instructional components: skills, practice, and backup skills. During skills time, teachers use a three-step process to introduce new material: modeling, prompting, and practice. Students sometimes respond in unison and sometimes individually to teacher prompts. ECRI teachers deploy a variety of instructional methods as they teach vocabulary, comprehension, literature, creative and expository writing, and study skills.

Practice time, when students learn to use the skills introduced in skills instruction, is devoted to three primary tasks: small group discussions, individual conferences with students, and individually administered mastery tests (oral or written performance-based tests). Teachers learn to develop mastery tests based on the curriculum and materials in place at the school. Students progress at their own pace as they demonstrate mastery of skills. Students also learn to keep records, diagnose problems, and judge when they are ready for mastery tests.

### Origin/Scope

The Exemplary Center for Reading Instruction (ECRI) has been teaching teachers since 1966 when Granite School District in Salt Lake City received a Title III grant. Ethna R. Reid has been its director since that time. Teachers from thousands of schools (mostly elementary and middle schools) in all 50 states have received ECRI training. Developers estimate that almost 2,500 schools have adopted ECRI as a schoolwide reading program.

### General Description

ECRI is a highly structured, teacher directed, mastery learning approach to instruction in language arts. Increased time on task, high expectations, individualized instruction, positive reinforcement, use of overt responses from students, and integrated instruction are all hallmarks of this approach.

Backup skills time is reserved for instruction in penmanship, spelling, dictation, and proofreading. Throughout all components of instruction, ECRI stresses that expressive skills (writing and speaking) are more important than receptive skills (reading and listening). Therefore, ECRI students write and discuss daily.

Although the ECRI approach was designed for language arts instruction, it can be used in other content areas as well.

## Results

A series of evaluations conducted from 1986 to 1990 demonstrated a significant positive impact of ECRI on student reading achievement. In Morgan County, Tennessee, for example, four schools implemented ECRI (1988-89) as their regular reading program in grades 2 through 7; one school retained its existing commercial reading program and acted as a comparison. All students were pre-tested in spring 1988 using the Stanford Achievement Test (SAT), then post-tested in spring 1989 after a full year of instruction. All ECRI grades recorded significant mean gains in reading comprehension and vocabulary, averaging 10.0 NCEs for comprehension and 8.8 NCEs for vocabulary. All comparison group gains, with the single exception of sixth-grade vocabulary, were nonsignificant or negative.

Overall, the studies involved 2,274 students in 11 public schools in regular education, special education, remedial education, bilingual education, and Chapter I classes from coast to coast. Regular education students ( $n=1,733$ ) gained an average of over 8 NCEs in total reading scores. Children with special needs (bilingual, Chapter I, and remedial) showed an average gain of 14 NCEs. Special education students showed an average gain exceeding 19 NCEs. All of these gains were statistically significant when compared with control and normative expectations.

Another series of evaluations conducted from 1990 to 1996 covered 6 sites in five states, involving 1,986 children. In one of the sites, a Chapter I school served as a comparison for two ECRI schools. At all six sites, ECRI students demonstrated significant gains on reading subtests of various standardized achievement tests. Average gains per class across all schools and groups ranged from 5.4 NCEs to over 26 NCEs.

At multiple sites not included in the studies described above (most of them elementary and middle schools), similar results have been demonstrated on a variety of standardized tests over the past 20 years.

## Implementation Assistance

- **Project Capacity:** In addition to five full time trainers, ECRI has 58 certified trainers available to offer awareness sessions and seminars throughout the country and to assist teachers as they implement the program. As ECRI staff members work with schools/districts, they encourage educators to develop trainers onsite. ECRI holds an annual Invitational Conference for Teachers of Teachers.
- **Faculty Buy-In:** ECRI sends awareness materials (such as videotapes of ECRI classrooms) and/or offers awareness sessions onsite to interested educators. Names of schools/districts that are implementing ECRI are also provided. Visits to these sites are encouraged. No formal buy-in is required.
- **Initial Training:** A five-day initial seminar with one ECRI staff person for 35-40 teachers is desirable, followed by intermediate and advanced seminars. The seminars include lecture, practice sessions, and demonstrations with students. ECRI also offers

seminars for principals and other district administrators and encourages them to attend the seminars teachers are attending.

- **Follow-Up Coaching:** Periodic visits by ECRI staff to teachers' classrooms to demonstrate, model, and monitor are encouraged. After-school workshops and personal consultations are offered. Teachers also can videotape their teaching and evaluate their proficiency with ECRI-designed proficiency checklists.
- **Networking:** Through its conferences, newsletter, toll free telephone number, and Web site, ECRI provides information, answers questions, and encourages educators throughout the country to collaborate. ECRI teachers share materials they have developed, schedule visits to each other's sites, and participate in special events at Reid School and Reid Ranch in Salt Lake City.
- **Implementation Review:** During the initial seminar, teachers establish goals and benchmarks and outline steps to achieve them. They are introduced to observation checklists and proficiency evaluations that can be used as they videotape their classrooms. Ninety days following the seminar, teachers complete a self-assessment checklist. Administrators who attend the seminars are provided strategies for assisting teachers and monitoring student progress. Teachers move through four levels of proficiency, depending upon the seminar they have attended: Initial Level, Introductory, Intermediate, and Proficient. The specificity of the ECRI training makes it easy to analyze its implementation.

## Costs

Each teacher in the initial seminar uses a set of ECRI texts that cost \$268. A second set is required for the next level of training. For the seminar and additional follow-up days, the school/district pays an honorarium of \$700 per day plus expenses for one ECRI trainer for up to 40 trainees. Schools/districts may also have to cover stipends or release time for teachers during training.

Existing district reading and content materials may be used. Supplies for teachers and students are those usually found in schools. No special staffing or facilities are required to implement ECRI. Awareness materials and a catalogue are available at no cost.

## Student Populations

ECRI has been implemented and evaluated in rural, suburban, urban, and Title I schools across the country. Evidence demonstrates the program's positive impact on regular, special needs, bilingual, and special education students.

## Special Considerations

There are no special considerations in adopting ECRI except those common to creating change within a school.

## Selected Evaluations

### Developer

ECRI Project. (1996). *ECRI validation reports*. Salt Lake City, UT: Reid Foundation.

### Outside Researchers

Ferguson, C. L., Mangum, J., & Coffey, K. (1998). The South Louisiana Study. *Mastery Learning and the Teaching of Reading*, 16(1), 1, 3, 7.

Reid, E. R. (1986). Practicing effective instruction: The Exemplary Center for Reading Instruction approach. *Exceptional Children*, 52(6), 510-519.

Reid, E. R. (1997). Exemplary Center for Reading Instruction (ECRI). *Behavior and Social Issues*, 7(1), 19-24.

(The latter two articles report evaluation data compiled by independent researchers.)

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Walker Elementary 145 Berkley Street Taunton, MA 02786 508-821-1285 Contact: Arthur Travers	250	urban fringe of large city	10%	0%	1%	2%	87%	33%	M	25%
Andrew Jackson Elementary PO Box 100 Halifax, NC 27839 252-583-2021 Contact: Vera Palmer	250	rural	99%	0%	0%	0%	1%	90%	0%	6%
Sojourner Truth School 1443 North Ogden Chicago, IL 60610 773-534-8121 Contact: Pemicia Pugh	485	large city	99%	0%	0%	0%	1%	100%	0%	1%
Reid School 2965 East 3435 South Salt Lake City, UT 84109 801-466-4214 Contact: Dr. Ethna R. Reid	200	urban fringe of mid- size city	1%	0%	3%	2%	94%	0%	1%	0%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year. M= Missing data.

## For more information, contact:

Ethna R. Reid  
Exemplary Center for Reading Instruction (ECRI)  
3310 South 2700 East  
Salt Lake City, Utah 84109  
Phone: 801-486-5083 or 800-468-3274  
Fax: 801-485-0561  
E-mail: [ereid@xmission.com](mailto:ereid@xmission.com)  
Web site: <http://www.ecri.cc>

## First Steps™ (K-10)

IN BRIEF First Steps	
<b>Founder</b>	State Education Department of Western Australia
<b>Current Service Provider</b>	First Steps National Headquarters
<b>Year Established</b>	1989
<b># Schools Served (Jan. 1998)</b>	Over 191 districts in the USA
<b>Level</b>	K-10
<b>Primary Goal</b>	provide teachers with the tools to link assessment, teaching, and learning and maximize each child's growth in language and literacy
<b>Main Features</b>	<ul style="list-style-type: none"><li>• <i>Developmental Continua</i> in reading, spelling, writing, and oral language</li><li>• direct links to developmentally appropriate teaching strategies and learning activities</li></ul>
<b>Impact on Instruction</b>	whole class, small group, and individual instruction
<b>Impact on Organization/Staffing</b>	whole school participation recommended; First Steps tutor recommended to provide ongoing schoolwide support
<b>Impact on Schedule</b>	none
<b>Parental Involvement</b>	parents support student growth in literacy through information provided in <i>Parents as Partners</i> booklets and workshops
<b>Technology</b>	none required
<b>Materials</b>	teacher resource material; training materials provided for First Steps tutors

### Origin/Scope

First Steps was developed in 1989 by the Education Department of Western Australia. It has been available in the United States since 1995 under the management of Heinemann USA. It is currently in use by over 600 schools in Australia, as well as in New Zealand, the United Kingdom, Canada, and throughout the English-speaking world. In the United States, over 191 school districts are using First Steps.

### General Description

First Steps is a literacy resource that supports schools in helping children in kindergarten through tenth grade make progress in their language and literacy development. Specifically, First Steps concentrates on reading, writing, spelling, and oral language development. Three components form the core of First Steps:

- School development, which

is incorporated into all First Steps training sessions to ensure that the whole staff can make informed, collaborative choices in response to student need;

- Professional development and ongoing support that emphasize the importance of theoretical understandings combined with sound practice; and
- Curriculum materials that consist of the *Developmental Continua* (a diagnostic framework that maps out the stages of language and literacy development) and resource books that complement the continua and provide teachers with additional developmentally appropriate activities.

Using the First Steps *Developmental Continua*, teachers, schools, and districts assess students' understandings and skills, select activities that link directly to assessment, and report student progress systematically and accurately to parents, school boards, and state departments of education.

Thus, First Steps serves both as a practical teaching resource and as a vehicle for accountability. It gives educators strategies for logically linking instructional activities to assessment. It enables all education stakeholders, including parents, to monitor the progress of

children's language and literacy development. It provides continuity of assessment and teaching from year to year. And it creates a common language for teachers, principals, parents, and children regarding learning, assessment, and reporting. In addition, First Steps professional development models are customized to meet the individual needs of the schools and districts that implement them.

## Results

Several studies conducted in Australia suggest that First Steps can benefit students. In one study, which based its conclusions on the TORCH reading comprehension test scores of year five students, First Steps students improved their reading ability more than students from non-First Steps schools. Another study, based on the Monitoring Standards in Education (MSE) Reading and Writing tests, found that after controlling for the impact of gender, race, language spoken at home, and years in Australia, there was a positive relationship between the degree of implementation of First Steps and student achievement. In a third study of two elementary schools' implementation of First Steps, pre- and post-profile results showed that every child who received First Steps instruction demonstrated growth in reading competence. (Growth was indicated by the achievement of specific First Steps indicators or by movement into the next First Steps developmental phase.) In addition, surveys of educators implementing the First Steps program revealed that around 70% felt the program was a success in their school.

Currently, Bank Street College of Education in New York, under the auspices of the U.S. Department of Education, is conducting a three-year U.S. study of the implementation of First Steps in a large urban school district.

## Implementation Assistance

- **Project Capacity:** National headquarters in Portsmouth, New Hampshire; First Steps consultants located in California, Massachusetts, New Hampshire, Oregon, Texas, and Washington. First Steps consultants from Australia and the United Kingdom regularly conduct courses in the United States.
- **Faculty Buy-In:** Whole school participation in the program is highly recommended.
- **Initial Training:** *School-Based Courses* (professional development for all teachers in a school or district) require two days per component (reading, writing, spelling, or oral language). *Tutor Training Courses* (specialized training that certifies individuals to conduct school-based courses for teachers in their district) consist of an initial five day session, and another session several months later that is three and a half days long.
- **Follow-Up Coaching:** First Steps tutors are available to support educators within their district as they work to implement the program.
- **Networking:** First Steps supports a Web site, e-mail assistance, toll-free phone assistance from consultants, a newsletter, video conferences, regional conferences, and periodic mailings from Heinemann.
- **Implementation Review:** First Steps design and networking capabilities allow schools to self-monitor their implementation.

## Costs

Costs for school-based courses are \$325 per person (minimum 25, maximum 50 persons). All-inclusive tutor training costs \$3,300 per person (minimum 15, maximum 40). The principal workshop costs \$200 per person (minimum 20).

## Student Populations

First Steps has been successfully implemented in K-10 classrooms with a wide range of student populations. The *Developmental Continua* can be used with ESL students and those experiencing difficulties as well as with high achieving students.

## Special Considerations

None.

## Selected Evaluations

### Developer

Deschamp, P. (1995a). *Student achievement: A study of the effects of First Steps teaching on student achievement*. Perth, Australia: Education Department of Western Australia.

Deschamp, P. (1995b). *A survey of the implementation of the literacy component of the First Steps project in WA*. Perth, Australia: Education Department of Western Australia.

Supporting linguistic and cultural diversity through First Steps: The highgate project. (1994). Perth, Australia: Education Department of Western Australia.

### Outside Researchers

Australian Council for Educational Research. (1993a). *Empirical validation of the First Steps spelling and writing continua*. Presented to the Western Australian Ministry of Education.

Australian Council for Educational Research. (1993b). *The impact of First Steps on the reading and writing ability of year 5 students*. An interim report to the Western Australian Ministry of Education.

Australian Council for Educational Research. (1993c). *The impact of First Steps on schools and teachers*. An interim report to the Western Australian Ministry of Education.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./Alaskan	Asian Amer.	Hisp.	White			
Barnes Elementary 13730 SW Walker Road Beaverton, OR 97005 503-672-3500 Contact: Brenda Lewis	594	urban fringe of large city	3%	0%	8%	35%	53%	30%	50%	7%
Superior Elementary 1800 South Indiana Drive Superior, CO 80026 303-543-9330 Contact: Holly Holcrin	683	rural	1%	<1%	8%	3%	87%	9%	3%	7%
Stephen Decatur Elementary 3935 Mooresville Road Indianapolis, IN 46221 317-241-0183	582	large city	17%	0%	1%	1%	80%	47%	1%	M
Abraham Edwards Elementary 45 Rantoul Street Beverly, MA 01915 978-921-6123 Contact: Karla Pressman	254	urban fringe of large city	4%	0%	1%	7%	91%	35%	10%	19%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year. M = Missing data.

**For more information, contact:**

Julie Broz or Patricia Carls  
First Steps  
361 Hanover Street  
Portsmouth, NH 03801  
Phone: 800-541-2086  
Fax: 603-431-7840  
E-mail: [firststeps@heinemann.com](mailto:firststeps@heinemann.com)  
Web site: <http://www.heinemann.com/firststeps>

## Junior Great Books (K-12)

IN BRIEF Junior Great Books	
<b>Founder</b>	Great Books Foundation, Chicago
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1962
<b># Schools Served (May 1998)</b>	9,500
<b>Level</b>	K-12
<b>Primary Goal</b>	teach students how to read with comprehension, think, and communicate as literate, responsible citizens
<b>Main Features</b>	<ul style="list-style-type: none"><li>• K-12 literature-based program using books and stories that are age appropriate</li><li>• Shared Inquiry method of literary analysis and discussion</li></ul>
<b>Impact on Instruction</b>	teachers learn consistently to apply inquiry-based methods of instruction using questioning strategies of shared inquiry; methods are intended to be carried over to other areas of the curriculum
<b>Impact on Organization/Staffing</b>	school appoints an onsite coordinator
<b>Impact on Schedule</b>	students participate in a minimum of three 45-minute sessions per week
<b>Parental Involvement</b>	at-home reading component
<b>Technology</b>	no computer equipment is required
<b>Materials</b>	includes grade-specific teacher guides, assessment strategies, student reading anthologies, student activity books, and audio tapes

critical and creative thinking that leads to understanding and intelligent action. The program cultivates a disposition to pursue ideas in depth and develops the skills needed to do so effectively.

Shared Inquiry serves as the core of JGB Program. Teachers engage students in interpretive discussions, encouraging them to search for answers to fundamental questions about the meaning of literary selections. Discussions begin with a question that challenges students to think critically about the reading assignment, develop their own interpretations, and support their ideas with evidence from the text. The teacher guides students toward developing their own text-based analyses by posing thought-provoking, open-ended questions for which there may be several reasonable answers. Because the answers are not stated explicitly in the text, students must grapple with and substantiate their ideas about the author's meaning. Throughout the discussion, the teacher models and nurtures thoughtful dialogue by asking questions to develop and build on students' responses.

### Origin/Scope

One million students from kindergarten through high school participate in Junior Great Books (JGB) each year. Developed in 1962 by the Great Books Foundation in Chicago, the program is currently used in 9,500 schools in 50 states and eight foreign countries. In 1992, the foundation published a major expansion of JGB to increase its accessibility to the full range of students in the classroom.

### General Description

Junior Great Books is an inquiry- and literature-based program designed to develop the critical thinking and reading skills of students in grades K-12. The JGB Shared Inquiry method and materials provide a consistent, intensive focus on moving students beyond rudimentary, literal comprehension to reading for meaning—beyond passive information consumption to the

The students' search for meaning begins with at least two readings of the selection, guided by close analysis of character development, the author's use of language, and other key elements of the piece. Shared Inquiry discussion provides a forum for students to articulate, support, and develop their interpretations, which are based on their own reading and on the ideas and evidence offered by their peers. Students are asked to further develop and support their ideas in persuasive and creative writing assignments following discussion.

JGB literature is age-appropriate and carefully selected to challenge and reward readers, encourage rigorous examination, and promote discussion. JGB students' early immersion in complex and multifaceted literature enables them to approach increasingly challenging selections in subsequent grades with confidence, curiosity, and thoughtfulness. For each reading selection, a sequence of interpretive strategies is suggested. The activities are designed to help students explore literature from their own point of view and develop and support their interpretations in oral and written contexts.

The JGB materials, strategies, and training equip teachers with the means to apply inquiry-based learning and produce results. JGB has been named as an exemplary program by the American Federation of Teachers, the National Javits Project for Language Arts Research, the Clark Foundation, the United States Department of Education's Program Effectiveness Panel for the National Diffusion Network, and the Texas Center for Educational Research.

## Results

Studies by the Great Books Foundation and by independent researchers have documented student gains in critical reading and thinking skills, reading comprehension, use of evidence, and vocabulary.

In one study, for example, teachers in third-grade classes in 15 Chicago-area schools implemented the JGB program. The performance of students in those classes was compared to the performance of students in control classes in the same schools. After 18 weeks, students in the JGB classes supported interpretations of stories with evidence from the text more frequently than students in control classes. JGB students also outperformed control students on the reading vocabulary subtest of the Iowa Test of Basic Skills (ITBS). Another study compared a group of fifth graders using JGB with a group using basal readers. Over the course of a semester, the JGB group demonstrated significantly greater gains in critical thinking skills (as measured by the Ross Test of Higher Cognitive Processes) than students in the basal reader group. A third study found that low-ability students in a JGB discussion group scored higher on the reading comprehension subtest of the ITBS and improved more in inferential comprehension than low-ability students in the control group.

Additionally, some schools using JGB have witnessed impressive gains in test scores. For example, an elementary school in Chicago adopted the program on a wide scale in 1994. By 1996, the number of sixth grade students who met the ITBS reading standard had increased by 24%. Similar increases were reported in other grades.

## Implementation Assistance

- ***Project Capacity:*** The Great Books Foundation provides a training staff to conduct onsite beginning, intermediate, and advanced courses and consultation for implementing schools and districts. In addition, a local site coordinator receives instruction in program coordination/support techniques.

- **Faculty Buy-In:** Teacher training is preceded by planning with school personnel to ensure effective practices and curricular fit. Implementation by all teachers in at least grades three through five is recommended.
- **Initial Training:** The foundation requires participating teachers to complete the two-day, 10-hour Basic Leader Training Course before using JGB. Participants receive a course manual, a grade-appropriate instructional guide, and various support pieces.
- **Follow-Up Coaching:** The foundation offers a program of follow-up support for teachers and administrators to ensure successful implementation. Onsite consultations and training are staged to provide teachers with guidance and feedback and to establish and review benchmarks for student performance. Schools implementing JGB are required to schedule a total of six contact days (training, classroom observations, demonstration, and coaching) for participating teachers during each of the first two years of implementation. At the end of the first year, lead teachers are identified for the following year and are given additional instruction.
- **Networking:** JGB provides ongoing professional development and support through a toll-free number with regional specialists and through the Internet (Web site, e-mail questions and answers, etc.).
- **Implementation Review:** The JGB consultant, along with the site coordinator, monitors implementation progress through regular observations, teacher surveys, and evaluation instruments. Recommendations are made by the consultant at regular checkpoints concerning the modification of implementation practices.

## Costs

The total cost per participating teacher is approximately \$2,100, which includes training, consulting, and level-specific materials (Teacher Editions, literature anthologies, activity books, and audiotapes). Cost is based on a class size of 30 students. Additional costs are teacher time for training and the appointment of a local coordinator.

## Student Populations

Junior Great Books is designed as a practical curriculum component for a wide range of students including Title I, English language learners, minority, remedial, and advanced learners. The JGB program introduces higher-level skills into the reading program in a way that supports acquisition of basic skills for all students.

## Special Considerations

Junior Great Books is based on Shared Inquiry instruction requiring the teacher to become guide and facilitator of ideas, rather than provider of facts. The approach emphasizes individual interpretation of texts and collaborative exploration and development of ideas.

## Selected Evaluations

### **Developer**

Great Books Foundation. (1992). *The Junior Great Books curriculum of interpretive reading, writing, and discussion: A proposal submitted to the Program Effectiveness Panel for the National Diffusion Network of the U.S. Department of Education*. Chicago: Author.

### **Outside Researchers**

Bird, J. J. (1984). *Effects of fifth graders' attitudes and critical thinking/reading skills resulting from a Junior Great Books program*. Ed.D. dissertation, Rutgers University, New Brunswick.

Heinl, A. M. (1988). *The effects of the Junior Great Books program on literal and inferential comprehension*. Paper presented at the National Reading Conference, Tucson, AZ.

Kelly, J., Benson, M., & Benson, D. (1996). *Junior Great Books: Summary of program implementation and evaluation*. Castleberry, TX: Castleberry Independent School District.

## Sample Sites

No sample site data available.

## For more information, contact:

Bill Siegel  
The Great Books Foundation  
35 East Wacker Drive, Suite 2300  
Chicago, IL 60601  
Phone: 800-222-5870, ext. 247  
Fax: 312-407-0224  
E-mail: [bill.siegel@greatbooks.org](mailto:bill.siegel@greatbooks.org)  
Web site: <http://www.greatbooks.org>

## Literacy Collaborative (K-2)

IN BRIEF Literacy Collaborative	
<b>Founder</b>	Literacy Collaborative at The Ohio State University
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1993
<b># Schools Served (6/1/00)</b>	535
<b>Level</b>	K-2
<b>Primary Goal</b>	to raise the level of literacy achievement of all kindergarten, first, and second grade students
<b>Main Features</b>	<ul style="list-style-type: none"><li>students learn literacy skills during authentic reading and writing experiences</li><li>school literacy coordinators guide the on-going professional development of teachers through training courses and coaching</li><li>systematic observation and assessment are used to monitor student progress</li></ul>
<b>Impact on Instruction</b>	instructional decision-making guided by observation of student learning
<b>Impact on Organization/Staffing</b>	establishes literacy leadership team consisting of literacy coordinator, principal, and teachers; requires release time for literacy coordinator to coach teachers; requires Reading Recovery teacher on staff
<b>Impact on Schedule</b>	uninterrupted daily 2-3 hour literacy block
<b>Parental Involvement</b>	KEEP BOOK program (take-home books) is available
<b>Technology</b>	currently developing online support for literacy coordinators; videotaping lessons an optional tool for reflection
<b>Materials</b>	multiple copies of leveled books for guided reading, professional resources, and training modules for literacy coordinators

### Origin/Scope

The Literacy Collaborative, originally known as the Early Literacy Learning Initiative, originated in 1986 as a collaboration between staff members from The Ohio State University and Reading Recovery and classroom teachers from the Columbus Public Schools. This collaboration resulted in the development of a framework for literacy lessons and a model for staff development that is led by a school-based literacy coordinator. The program has been implemented in 535 schools in 27 states.

### General Description

The Literacy Collaborative is a long-term professional development program designed to provide a comprehensive, school-wide approach to literacy instruction in the primary grades. The goal is to increase literacy achievement for all students and to ensure that every child attains successful literacy levels by the end of second grade.

#### *Theoretical Base:*

The program is based on the research of Marie Clay, Jerome Bruner, and Lev Vygotsky and maintains that a variety of classroom contexts for language and literacy learning challenge students and allow them to use their strengths as learners. Strong instruction, guided by systemic teacher observation of students, supports learning through direct teaching and independent student application.

**Instructional Framework:** Students learn literacy skills during authentic reading and writing experiences that include reading aloud to children, shared reading, guided reading, independent reading, shared writing, interactive writing, writing workshop, and independent writing. Teachers work with both heterogeneous and homogeneous groups of students depending on students' instructional needs. Reading Recovery is available for first grade students needing

additional help. A parent outreach program, KEEP BOOKS, includes small, inexpensive books that children first read in school and then take home for further practice.

**Assessment and Research:** Both formal and informal measures are used to monitor student progress, inform instruction, and facilitate reflective practice. A five-year data collection program analyzes changes in students' literacy learning and evaluates school change over time.

**Implementation Phases:**

- *Awareness and Planning:* The school staff investigates the Literacy Collaborative, develops a local plan, and submits an application for literacy coordinator training.
- *Literacy Coordinator Training and Start-Up:* The literacy coordinator undergoes training; the school-based literacy team begins to build a book collection and to collect baseline data.
- *School-Level Implementation:* The literacy coordinator provides the year-long training course for kindergarten, first, and second grade teachers; begins the home-school KEEP BOOK program; and provides demonstrations, coaching, and analysis of teaching.
- *Refinement and Independent Implementation:* The literacy coordinator continues to support teachers' implementation of the framework through coaching and professional development sessions and the analysis of student data.

## Results

The Literacy Collaborative uses four measures to evaluate the program each year, including standardized test results from the Gates-MacGinitie Reading Test. Preliminary research results presented in 1998 compared the scores of second grade classes tested from the fall of 1995 to the fall of 1997. The study included five schools which had implemented the program for four or more years. Four of the five schools (80%) demonstrated NCE gains on the Gates-MacGinitie Reading Test. The average NCE gain across schools was 5.6 NCEs in Reading Comprehension and 5.3 NCEs in Total Reading.

A 1999 research report compared the scores of second grade classes tested from the fall of 1995 to the fall of 1998. The study included 12 schools that had implemented the program for at least four years. Seven of the 12 schools (58%) demonstrated NCE gains on the Gates-MacGinitie Reading Test. Evaluators found that achievement gains were greater for students remaining at the same school from kindergarten through second grade. Schools with mixed results tended to have weaker implementation across the school and within classrooms.

Additional analysis of the data collected between 1995 and 1998 compared the distribution of student scores across quartiles, which are specified by the Gates-MacGinitie Reading Test using national norms. The analysis revealed that a quartile shift occurred in 6 out of the 12 schools, resulting in fewer students in the lower quartile and a higher number of students in the middle and upper quartiles. A 7<sup>th</sup> school experienced a gain in mean scores but did not shift in quartile distribution.

## Implementation Assistance

- *Project Capacity:* The literacy coordinator training is available at six university centers, one regional center, and 14 district centers nationwide. Fifteen full-time and five part-time university trainers provide support to the literacy coordinators during their training and implementation years, continuing for as long as the schools are part of the Literacy Collaborative network.
- *Faculty Buy-In:* The school staff makes a five-year commitment to implementing the Literacy Collaborative at the time of application. A school literacy leadership team

(composed of primary classroom teachers, Reading Recovery teachers, Title I teachers, and the principal) develops a local plan and monitors implementation.

- **Initial Training:** Literacy team planning sessions are offered each year to schools interested in the model. A team of six to eight school personnel attends five full-day sessions. The school's literacy coordinator participates in a year-long course that includes seven weeks of training at one of the university or district centers.
- **Follow-Up Coaching:** Each literacy coordinator conducts a long-term school-based program of professional development that provides training and coaching for the school's kindergarten, first, and second grade teachers as they implement the Literacy Collaborative framework. University or district trainers make at least two site visits per year to observe the literacy coordinators in action—teaching students, and teaching and coaching fellow teachers. The literacy coordinator attends yearly professional institutes.
- **Networking:** Participating teachers may attend the annual Reading Recovery Conference, where many sessions address implementation of the Literacy Collaborative framework.
- **Implementation Review:** After the second year, each literacy coordinator prepares an annual research report summarizing the student data collected. The literacy coordinator leads the school faculty in setting new goals for the following year that will ensure greater student achievement in reading and writing. National data, collected and analyzed at The Ohio State University, provides information needed to support school-level implementation.

## Costs

**Team Planning Sessions:** Optional team planning sessions (\$3,000-4,000) are offered to schools in Phase 1.

**Literacy Coordinator Training:** The costs for training the literacy coordinator include the instructional fee (\$12,500), materials fee (\$3,000), and tuition (varies from site to site; at OSU, tuition is \$1,800 in-state and \$4,500 out-of-state). Literacy coordinator travel, lodging, and meals are extra.

**Annual Charges:** Charges in following years include: literacy coordinator institute registration fee (\$300), data analysis fee (\$100 per 250 primary-aged students), school affiliation fee (\$20), and site visit fee (\$500 per visit plus travel).

**Release Time:** Literacy coordinators need release time to attend training sessions, to observe and coach classroom teachers, and to collect data to monitor student progress.

**Books:** The school establishes a book room of multiple copies for teaching guided reading.

## Student Populations

The Literacy Collaborative has been implemented in urban, suburban, and rural schools, including many Title I and several bilingual schools (Texas, Chicago, and Boston). Spanish versions of the assessment materials and benchmark books are available. The needs of special education students are served in the Literacy Collaborative teaching model.

## Special Considerations

The goal of raising literacy achievement for all children may require teachers to adopt new teaching practices and dedicate an uninterrupted daily two-to-three hour block of time to literacy. The model requires one-to-one Reading Recovery tutoring for first grade students needing additional help.

## Selected Evaluations

### Developer/Implementer

Pinnell, G. S. (1998). *The Early Literacy Learning Initiative at The Ohio State University research report: January 1998*. Columbus, OH: The Ohio State University.

Pinnell, G. S. (1999). *Literacy Collaborative 1999 research report*. Columbus, OH: The Ohio State University.

### Independent Researchers

No studies available.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./Alaskan	Asian Amer.	Hisp.	White			
Hedges Elementary 176 Hedges Street Mansfield, OH 44907 419-525-6317 Principal: JoAnn Hipsher	384	mid-size city	50%	0%	0%	0%	50%	69%	0%	19%
Union Furnace School 17938 Main Street Union Furnace, OH 43158 740-385-5393 Principal: Carol Carr	205	rural	1%	1%	0%	0%	98%	32%	0%	33%
James M. Curley School 40 Pershing Road Jamaica Plain, MA 02130 617-635-8239 Principal: Kathleen Armstrong	327	large city	56%	0%	3%	23%	18%	M	0%	9%
Tilson Elementary 2100 Bixler Circle Decatur, GA 30032 404-241-5122 Principal: Davis Cooper	601	urban fringe of large city	99%	1%	0%	0%	0%	91%	0%	1%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year. M = Missing data.

## For more information, contact:

Andrea McCarrier  
Literacy Collaborative  
The Ohio State University  
807 Kinnear Road  
Columbus, Ohio 43212  
Phone: 614-292-1759  
Fax: 614-688-3980  
E-mail: [mccarrier.1@osu.edu](mailto:mccarrier.1@osu.edu)

# National Writing Project (K-16)

IN BRIEF National Writing Project	
<b>Founder</b>	James Gray, University of California, Berkeley
<b>Current Service Provider</b>	National Writing Project at Cal-Berkeley
<b>Year Established</b>	1974
<b># Schools Served (Jan. 1998)</b>	160 sites
<b>Level</b>	K-16
<b>Primary Goal</b>	improving the teaching of writing
<b>Main Features</b>	<ul style="list-style-type: none"><li>• teachers-teaching-teachers model of professional development</li><li>• local and national networks of exemplary practitioners</li><li>• professional development programs designed collaboratively with schools and districts to reflect local needs</li><li>• writing promoted as a tool for learning across the curriculum</li></ul>
<b>Impact on Instruction</b>	provides strategies for linking instruction, curriculum, standards, and assessment in the teaching of writing
<b>Impact on Organization/Staffing</b>	none required
<b>Impact on Schedule</b>	none required
<b>Parental Involvement</b>	professional development programs can be designed with parent engagement components
<b>Technology</b>	professional development programs can be designed with technology components
<b>Materials</b>	none required

## Origin/Scope

The National Writing Project (NWP) began in 1974 at the University of California, Berkeley where its founder, James Gray, established a program for K-16 teachers called the Bay Area Writing Project. The NWP has now been replicated at 160 sites in 46 states and Puerto Rico.

## General Description

The NWP has three major goals: (a) to improve the teaching of writing at all grade levels, (b) to improve professional development programs for teachers, and (c) to improve the professional standing of classroom teachers. Writing Project sites are typically housed in universities and serve multiple schools and school districts. Local sites accomplish these goals by supporting a K-16 network of exemplary teachers of writing who are able to work with schools around their professional development needs.

In practice, each local site identifies and recruits exemplary teachers for an annual invitational institute on its campus. Most often held in the summer, this intensive institute convenes teachers to demonstrate and examine their approaches to teaching writing; consider strategies for using writing as a tool in all subject areas; learn about how to teach writing by writing themselves; study theory and research underpinning best practices in the teaching of writing; and prepare themselves to lead professional development programs in the schools during the academic year.

Writing project workshops in the schools, then, are characterized first by the fact that they are taught by credible teachers — the graduates of the invitational institutes. Second, these workshops are tailored to the needs of the contracting school or district. The local project works in concert with the school faculty to design full professional development programs with sessions matched to the school, teacher, and student context. Programs are conducted in a series, rather than as one-shot events, so that teachers can receive support as they make changes in their practices. Third, writing project programs can be designed to include features like peer coaching

or to work with regular school support structures like school improvement committees or grade level teams.

National Writing Project sites also provide an array of other programs to serve individual teachers and schools, such as open enrollment summer institutes, teacher research groups, assessment workshops, emergent literacy programs, a series on writing across the curriculum, support for new teachers, writing and reading conferences, young writer's programs, seminars and study groups, and parent workshops. Program offerings at local sites typically reflect the needs and interests of teachers in their service areas.

## Results

The NWP has a number of studies of impact on student performance and behavior. In a current study, 770 students in the Santa Ana Unified School District (SAUSD) are participating in the UCI Writing Project's Pathway Project. The goal of the project is to enhance the reading and writing skills of second-language learners, who represent 72% of SAUSD students, and to prepare them to become college bound. In the pilot year:

- Pathway students had better attendance rates and higher end-of-year GPAs than comparable control students, and they had improved one-half to one full letter grade on a pre-and post-test analytical writing sample;
- 25% of graduates attending Santa Ana College placed in Freshman Composition as opposed to the overall SAUSD placement rate of 4%; and
- 12% of graduates were accepted at UC campuses as opposed to the SAUSD overall acceptance rate of 3-6%.

In Baltimore, the Abell Foundation sponsored an evaluation of the effectiveness of an NWP-sponsored program, Write to Learn. The evaluation study, which used a controlled comparison school design, focused on the effect of training experiences on the practice of teaching writing and whether student achievement in writing improves as a result. Students participating scored 18 points higher on a direct assessment of writing than comparison students and were much more likely to plan, revise, and edit their writing. In the study of teacher practices that relied on portfolios, self-report, and observation to identify teacher adoption of effective practices in the teaching of writing, language arts teachers scored 25% higher than their comparison colleagues on an assessment of practice, and content area teachers scored 40% higher.

## Implementation Assistance

- **Project Capacity:** Each local site supports its own cadre of teacher leaders who develop and conduct programs suited to the needs of the community it serves. Overall, 10,312 teacher leaders conducted NWP programs in 1996-97 for 149,396 participants across the country.
- **Faculty Buy-In:** Many programs are open to individual teachers or teacher teams at local sites. Schools can contract with writing projects to provide inservice programs according to faculty needs. There is no requirement for whole school participation.
- **Initial Training:** Teachers can receive initial training in approaches to the teaching of writing or in using writing as a tool for learning across the disciplines through open enrollment summer institutes and school year inservice programs. Many writing projects also sponsor conferences and weekend workshops.

- **Follow-Up Coaching:** Follow-up programs, including coaching and action research, can be built into the inservice design at the request of the contracting school or district.
- **Networking:** Nationally, the NWP hosts a yearly meeting as well as conferences and retreats for teacher leaders. The NWP publishes two journals, *The Quarterly* and *The Voice*, and a series of books on the teaching of writing. The NWP web site supports electronic networking among teachers across the 160 local sites.
- **Implementation Review:** Local sites conduct evaluations of all their programs. The NWP conducts an annual three-day review of every site. Forty reviewers read site reports and study site data collected by an independent evaluator, Inverness Research Associates.

## Costs

Local NWP sites set the fees for their services. Teachers contribute \$10 per year; host institutions of local NWP sites pay \$150 per year; and contributing sponsorships make up a third funding category.

## Student Populations

The NWP serves teachers across the country. Teacher leaders associated with a local site draw on experience with a wide range of students and school contexts. The NWP also supports specific networks for sites focused on professional development in urban schools and in rural schools, and programs for teachers in districts with a high proportion of students in poverty and for teachers of English language learners. National student data for the 1997 leadership cadre report 20.2% Title 1; 40.5% AFDC; 12.5% LEP.

## Special Considerations

None.

## Selected Evaluations

### Developer

Eidman-Aadahl, E. (1990). *Summary report: The evaluation of the Write to Learn Program, second year*. Baltimore: Abell Foundation. (Available from the Maryland Writing Project, Towson State University).

### Outside Researchers

None available.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./Alaskan	Asian Amer.	Hisp.	White			
Western Middle School 2201 West Main Street Louisville, KY 40212 502-485-8345 Contact: Jean Miller	780	mid-size city	50%	0%	<1%	<1%	40%	73%	10%	25%
George C. Meade Elementary 1600 North 18th Street Philadelphia, PA 19121-3297 215-684-5062 Contact: Frank Murphy	519	large city	98%	0%	0%	0%	0%	97%	0%	4%

Pat Henry Elementary 1401 NW Bessie Lawton, OK 73507 580-585-6383 Contact: Lisa Robinson	600	mid-size city	34%	9%	2%	12%	45%	66%	9%	15%
Kemper County High School (7-12) PO Box 429 Dekalb, MS 39328-0429 601-743-5292 Contact: Emanuel Beat	658	rural	96%	<1%	<1%	0%	4%	80%	0%	2%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

### For more information, contact:

Richard Sterling, Executive Director  
 National Writing Project  
 2105 Bancroft Way, #1042  
 University of California  
 Berkeley, CA 94720  
 Phone: 510-642-0963  
 Fax: 510-642-4545  
 E-mail: [nwp@writingproject.org](mailto:nwp@writingproject.org)  
 Web site: <http://www.writingproject.org>

## Reading Recovery (first grade)

IN BRIEF Reading Recovery	
<b>Founder</b>	Marie Clay
<b>Current Service Provider</b>	Reading Recovery Council of North America plus multiple universities and trainers across the country
<b>Year Established</b>	1984 (United States)
<b># Schools Served (5/1/01)</b>	10, 664
<b>Level</b>	first grade
<b>Primary Goal</b>	to bring first grade students who are having difficulty learning to read and write to the average level of their class as quickly as possible (12-20 weeks)
<b>Main Features</b>	<ul style="list-style-type: none"><li>• one-to-one tutoring program</li><li>• individualized instruction</li><li>• specially trained teachers</li></ul>
<b>Impact on Instruction</b>	no necessary impact on regular reading classroom instruction, though number of low-performing students is reduced
<b>Impact on Organization/Staffing</b>	opportunity for highly focused professional development
<b>Impact on Schedule</b>	30-minute pull-out lessons; Reading Recovery teachers are expected to work at least one-half of each day in Reading Recovery
<b>Parental Involvement</b>	daily reading and reconstruction of cut-up sentence written by the students; occasional observation of lessons
<b>Technology</b>	minimal requirements: completion of scanable reporting forms to follow students' progress
<b>Materials</b>	little books, writing materials, easel, magnetic letters, markers, erasable board, reporting forms; one-way mirror at training site

### Origin/Scope

Reading Recovery was developed by New Zealand educator and psychologist Marie M. Clay. The program came to the United States via Ohio State University in 1984. Since then, over 10,000 schools have used Reading Recovery.

### General Description

Reading Recovery is an intensive early intervention literacy program. First-grade children who score in the lowest 20% of their class (based on individual measures of assessment and teacher judgment) are eligible to participate. Their regular classroom instruction is supplemented with daily one-to-one, 30-minute lessons for 12-20 weeks with a specially trained teacher.

Reading Recovery lessons provide children with individualized instruction that focuses on their strengths, experience with books and stories, accelerated learning expectations, and strategies that help them become independent learners. Each

day, Reading Recovery teachers record the details of every lesson they provide. Instruction continues until participants can read at or above the class average, and demonstrate the use of independent reading and writing strategies. The student is then "discontinued," thus providing the opportunity for another child to enter Reading Recovery.

Typically, Reading Recovery teachers spend a half-day teaching Reading Recovery lessons and a half-day in other instructional activities. Each Reading Recovery teacher is expected to serve at least eight children over the course of one academic year.

## Results

Reading Recovery students are assessed through the Observation Survey (a literacy assessment developed by Clay that includes reliable and valid indices), which compares them to their class average at the beginning and end of the school year. Of over 4,000 Ohio students discontinued from Reading Recovery in 1996-97, year-end testing showed 88% scoring in the average band for writing vocabulary, 97% for hearing and recording sounds in words, and 91% for text reading level on the Observation Survey.

Of all students nationwide who entered Reading Recovery in 1996-97, 60% achieved the average of their class. Of students who received a full program with an opportunity to participate for 20 weeks, 83% achieved the average reading level of their class. In follow-up studies in Texas (using the Texas Assessment of Academic Skills) and Massachusetts (using Gates MacGinitie and Slosson Test of Word Recognition), discontinued children scored within the average band of their peers on standardized tests in second, third, and fourth grades. In Ohio a recent study examined the progress of all Reading Recovery students on fourth grade proficiency tests. The results indicate that all students made substantial gains in reading and writing as demonstrated on the fourth grade proficiency test performance.

## Implementation Assistance

- ***Project Capacity:*** 23 University Regional Training Centers that offer training for Reading Recovery Teacher Leaders; 429 teacher training sites; 16,548 total trained and active Reading Recovery professionals throughout the U.S.
- ***Faculty Buy-In:*** Sites make commitments to train teacher leaders and teachers, and to continue the program beyond the initial training year. Continued collaboration between Reading Recovery professionals and classroom teachers is critical.
- ***Initial Training:*** Initial training for teacher leaders, who are post-master's degree teachers, takes one year, provides 21 graduate credit quarter hours, and is located at one of the 23 University Training Centers. Initial training for Reading Recovery teachers includes a year-long program of training provided by trained teacher leaders. This training provides the teachers with nine graduate quarter credit hours. It includes weekly training, teaching, and reflective and analytical discussions.
- ***Follow-Up Coaching:*** Following the training year, teacher leaders participate in professional development programs provided by the University Regional Training Centers. Trainers from these centers are available to assist the teacher leaders as needed. Reading Recovery teachers are expected to participate in continuing contact with the teacher leader, which consists of a minimum of six sessions. Teachers also are encouraged to attend at least one Reading Recovery conference during the year.
- ***Networking:*** Reading Recovery supports an annual Teacher Leader Institute and professional development programs for teacher leaders; various Reading Recovery conferences are held throughout the country each academic year; newsletters, a professional journal, and other focused publications are also available.
- ***Implementation Review:*** The University Regional Training Centers are responsible for ensuring effective site implementation of Reading Recovery. The program is monitored through site visits to teacher leaders and through statewide implementation visits conducted by specially-trained Reading Recovery trainers of teacher leaders. In addition, the program collects entrance and exit data on every child in the program, and analyzes it at the school, district, site, state, and national levels on an annual basis.

## Costs

Costs for Reading Recovery occur in two phases: start-up and ongoing expenses. Start-up costs include:

- Teacher leader's salary, university tuition, and living expenses for a year of training
- Books and materials
- Construction of a one-way mirror and sound system for the training site

Ongoing expenses include:

- Teacher leader's salary, travel, and support
- Teacher salaries and benefits for time dedicated to Reading Recovery
- Books and materials for lessons and research
- Tuition for teacher education from a university or college that grants academic credit
- Ongoing professional development for teacher leaders and teachers

Because teacher salaries and school expenses vary, each school must calculate its own costs. A report published by the Reading Recovery Council of North America reports that the cost per child ranges from \$2,300 to \$3,500. This investment reduces the number of children who need ongoing, expensive services. Program costs, then, must be considered against the costs of retention and/or special provisions for children requiring long-term specialist help.

## Student Populations

In addition to serving any student with demonstrated need, Reading Recovery training and materials are also available in Spanish (*Descubriendo La Lectura*).

## Special Considerations

Some training outside of school hours may be necessary, and may include travel. Reading Recovery involvement requires parental permission. This permission includes a commitment from the parent to assist the child in daily reading activities as a follow-up to the daily Reading Recovery lesson. Schools and parents must be willing to have students transported to the "behind the glass" sessions for lessons during the training and continuing contact process.

## Selected Evaluations

### Developer

Pinnell, G., McCarrier, A., & Button, K. (1990). *Teachers' application of theoretical concepts to new instructional settings* (Report No. 8, Early Literacy Research Project). Columbus, OH: Ohio State University.

Lyons, C., & Beaver, J. (1995). Reducing retention and learning disability placement through Reading Recovery: An educationally sound cost-effective choice. In R. Allington and S. Wamsley (Eds.), *No quick fix: Redesigning literacy programs in America's elementary schools* (pp. 116-136). New York: Teachers College Press and the International Reading Association.

### Outside Researchers

Escamilla, K. (1994). *Descubriendo La Lectura: An early intervention literacy program in Spanish*. *Literacy, Teaching and Learning: An International Journal of Early Literacy*, 1, 57-85.

Jaggard, A., & Simic, O. (1996). *A four-year follow-up study of Reading Recovery children in New York state: Preliminary report*. New York: University Reading Recovery Project, School of Education.

Stringfield, S., Millsap, M. A., Herman, R., Yoder, N., Brigham, N., Nesselfeldt, P., Schaffer, E., Karweit, N., Levin, M., & Stevens, R. (1997). *Urban and suburban/rural special strategies for educating disadvantaged children: Final report*. Washington, DC: U.S. Department of Education.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab:
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Brandywine Elementary School 14101 Brandywine Road Brandywine, MD 20613-3033 301-372-0100 Contact: Maryann McBride	522	rural	71%	2%	1%	1%	25%	20%	4%	10%
Brown (Georgia) Elementary PO Box 7010 Paso Robles, CA 93447-7010 805-237-3387 Contact: Irma Sanchez	507	mid-size city	3%	1%	1%	60%	36%	64%	14%	12%
Clinton Elementary School 10 Clinton Heights Avenue Columbus, OH 43202-1244 614-365-6532 Contact: Synda Slegeski	358	large city	21%	<1%	1%	3%	75%	23%	0%	13%
Dewey Elementary School 905 Dickinson Chillicothe, MO 64601-2099 660-646-4255 Contact: Sharon Utterback	312	small town	3%	0%	0%	0%	97%	31%	0%	16%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

### For more information, contact:

Jean Bussell  
 Reading Recovery  
 1929 Kenny Road, Suite 100  
 Columbus, OH 43210  
 Phone: 614-292-1795  
 Fax: 614-292-4404  
 E-mail: bussell.4@osu.edu  
 Web site: <http://www.readingrecovery.org>

## **Mathematics Models**

4

## Connected Mathematics Project (6–8)

IN BRIEF Connected Mathematics Project	
<b>Founder</b>	Connected Mathematics Project, based at Michigan State University
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1991
<b># Schools Served (5/1/01)</b>	3,200
<b>Level</b>	6-8
<b>Primary Goal</b>	to help teachers and students develop deep and long-lasting mathematical understanding, reasoning, and skills
<b>Main Features</b>	<ul style="list-style-type: none"><li>• “investigations,” or explorations of rich problems that embody important mathematical concepts</li><li>• connections among ideas</li><li>• emphasis on inquiry</li><li>• multi-dimensional assessment package</li></ul>
<b>Impact on Instruction</b>	see Main Features; also requires use of graphing calculators
<b>Impact on Organization/Staffing</b>	none
<b>Impact on Schedule</b>	designed for average class periods; however, periods of 60+ minutes are desirable
<b>Parental Involvement</b>	schools are encouraged to use <i>Getting to Know CMP</i> to acquaint parents with CMP materials and ideas for helping their children
<b>Technology</b>	scientific calculator for grade 6; graphing calculator for grades 7 and 8; computers optional
<b>Materials</b>	complete student books, teacher books with assessments and blackline masters, and a <i>Getting to Know CMP</i> book

### Origin/Scope

The Connected Mathematics Project (CMP), headquartered at Michigan State University, was funded from 1991-1997 by the National Science Foundation. Project directors are Glenda Lappan, William Fitzgerald, and Elizabeth Phillips of Michigan State University; James Fey of the University of Maryland; and Susan Friel of the University of North Carolina. CMP has been implemented in 3,200 schools in all 50 states plus Washington, D.C., and Puerto Rico.

### General Description

CMP is a mathematics curriculum for middle school students that is designed to foster knowledge and skill in using the vocabulary, forms of representation, materials, tools, techniques, and intellectual methods of the discipline of mathematics. CMP is intended to enable students to define and solve problems with reason, insight, inventiveness, and

technical proficiency. The development of CMP has focused on the tight alignment of curriculum, instruction, and assessment. The overall project goal is to enable all students to reason and communicate proficiently in mathematics.

CMP development has been guided by five instructional themes:

- **Mathematical Investigations:** The curriculum is organized around “big ideas” in mathematics — clusters of important, related mathematical concepts, processes, ways of thinking, skills, and problem-solving strategies — that are studied in depth with the development of deep understanding as a goal.
- **Reasoning:** Students grow in their ability to reason effectively with information represented in pictorial, graphic, numeric, symbolic, and verbal forms, and to move flexibly among these representations.

- **Teaching for Understanding:** Instruction emphasizes inquiry and discovery of mathematical ideas through investigation of rich problem situations.
- **Connections:** The curriculum emphasizes significant connections among various mathematical topics and problems in other school subjects. The curriculum offers an opportunity to revisit and deepen understanding of ideas over time.
- **Technology:** Selection of mathematical goals and teaching approaches reflects the information processing capabilities of calculators and computers and the fundamental changes these tools are making in the way people learn and apply their knowledge.

During grades six through eight, CMP students develop knowledge and skill within five mathematical strands: number, geometry and measurement, probability, statistics, and algebra. Outcomes are specified for each of these areas by the end of eighth grade.

CMP is a problem-centered curriculum. It is organized into units that address mathematical ideas through a series of "investigations." Each investigation contains problems for teachers and students to explore. As students explore a series of connected problems, they develop deep understandings of important mathematical concepts embedded within the problems.

## Results

The Iowa Test of Basic Skills math subtest and a standards-based problem-solving test were administered to CMP and non-CMP students in grades six, seven, and eight. On the problem-solving test, CMP students significantly outperformed non-CMP students. On the ITBS, CMP sixth and seventh graders performed as well as their non-CMP counterparts, and CMP eighth graders significantly outperformed those not in CMP. In a study of proportional reasoning, CMP students at all levels significantly outperformed non-CMP students. CMP is currently gathering evidence of student achievement and/or teacher change from non-pilot locales. These locales are part of a three-year leadership training project.

## Implementation Assistance

- **Project Capacity:** The national center for the CMP is in the Department of Mathematics at Michigan State University. CMP is also a satellite for the Show-Me Center, directed by Barbara Reys at the University of Missouri, which supports the dissemination and implementation of NSF-funded standards-based mathematics curricula. Both centers, together with the publisher, Dale Seymour (and Scott Foresman-Addison Wesley), can provide information about the project, including evaluation data and professional development activities.
- **Faculty Buy-In:** There are no formal requirements or commitments on the part of the school or faculty. It is recommended that a district that is considering adopting CMP develop a long-term professional development plan to help teachers and administrators implement the curriculum.
- **Initial Training:** National *Getting to Know CMP* workshops are provided in the summer for teachers and/or administrators who are considering or are about to implement the CMP curriculum in their schools.

- **Follow-Up Coaching:** There is no required assistance during the first two or three years of implementation. A national CMP Users' Conference for teachers and/or administrators is conducted during the school year to discuss issues, implementation strategies, and successes for schools using the CMP curriculum. Also, CMP has developed a long-term professional development model that has been used in the pilot sites as well as with several NSF-funded leadership projects. Through these projects CMP has trained a number of teachers and curriculum coordinators who can provide implementation assistance to schools. CMP keeps a referral list of names that they can recommend to districts. Both the Show-Me Center and the publisher can also respond to requests for help in implementing the CMP curriculum.
- **Networking:** In addition to hosting an annual Users' Conference, CMP maintains a Web site and an e-mail address for questions and suggestions.
- **Implementation Review:** Since CMP is now published commercially, there is no check on the extent nor completeness of CMP implementation.

## Costs

The costs of buying the student and teacher editions of CMP are competitive with the costs of standard textbook materials.

## Student Populations

CMP is implemented in regions across the U.S. including urban, suburban, and rural settings covering a wide socioeconomic spectrum. Settings range from largely white to predominately minority to mixed environments. Regular, special education, and gifted and talented students from both public and private schools participate.

## Special Considerations

None.

## Selected Evaluations

### Developer

Ben-Chaim, D., Fey, J. T., Fitzgerald, W. M., Benedetto, C., & Miller, J. (1997). *A study of proportional reasoning among seventh and eighth grade students: A short report*. Paper presented at the annual meeting of the American Educational Research Association, Chicago.

### Outside Researchers

Hoover, M. N., Zawojewski, J. S., & Ridgeway, J. (1997). *Effects of the Connected Mathematics Project on student attainment*. Paper presented at the annual meeting of the American Educational Research Association, Chicago.

## Sample Sites

For information about schools using CMP and willing to share information, contact the Scott-Foresman sales representative in your region or the publisher, Dale Seymour.

**For more information, contact:**

Yvonne Grant  
Connected Mathematics Project  
A715 Wells Hall  
Michigan State University  
East Lansing, MI 48824  
Phone: 517-432-2870  
Fax: 517-432-2872  
E-mail: [cmp@math.msu.edu](mailto:cmp@math.msu.edu)  
Web site: <http://www.mth.msu.edu/cmp>

# Core-Plus Mathematics Project/ Contemporary Mathematics in Context (9–12)

IN BRIEF	
Core-Plus Mathematics Project/ Contemporary Mathematics in Context	
<b>Founder</b>	Core-Plus Mathematics Project
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1992
<b># Schools Served (5/1/01)</b>	over 500
<b>Level</b>	9–12 (plus accelerated 8 <sup>th</sup> grade)
<b>Primary Goal</b>	powerful mathematics for all students
<b>Main Features</b>	<ul style="list-style-type: none"> <li>integrated, connected strands</li> <li>mathematical modeling and problem solving</li> <li>core topics accessible to all students</li> <li>collaborative group investigations</li> <li>multi-dimensional assessment</li> </ul>
<b>Impact on Instruction</b>	materials promote active learning, active teaching, and assessment; graphics calculators are used as tools for exploration
<b>Impact on Organization/ Staffing</b>	all teachers are encouraged to start teaching CPMP at Course 1 and move up a course each year
<b>Impact on Schedule</b>	<ul style="list-style-type: none"> <li>common planning periods for staff teaching same course (encouraged)</li> <li>works well in block schedules and traditional two-semester schedules</li> </ul>
<b>Parental Involvement</b>	encouraged early in adoption process
<b>Technology</b>	graphics calculators
<b>Materials</b>	calculator software, linkage strips for space-shape study

## Origin/Scope

Research and development for the Core-Plus Mathematics Project (CPMP) was funded by a series of grants from the National Science Foundation. The project was directed by Christian Hirsch of Western Michigan University, Arthur Coxford of the University of Michigan, James Fey of the University of Maryland, and Harold Schoen of the University of Iowa. Each course goes through a three-year research and development process. Courses 1, 2, 3, and 4 have been published by McGraw-Hill/Glencoe/Everyday Learning Corporation. The materials have been used in over 500 schools. (Note: The publisher's title for the materials is Contemporary Mathematics in Context [CMIC]. The two titles — CMIC and CPMP — are used interchangeably.)

## General Description

CMIC is a four-year integrated mathematical sciences curriculum for high schools: a three-year sequence for all students, plus a fourth-year course continuing the preparation of students for college mathematics. Its goal is to prepare students for success in college, careers, and daily life in contemporary society. CMIC content and pedagogy are based on the National Council of Teachers of Mathematics Standards. The curriculum builds on the theme of mathematics as sense-making. Through investigations of real-life contexts, students develop a rich understanding of important mathematics that makes sense to them and, in turn, enables them to make sense out of new situations and problems.

CMIC courses share the following mathematical and instructional features:

- **Multiple connected strands:** Each year of the curriculum features four strands — algebra and functions, statistics and probability, geometry and trigonometry, and discrete mathematics.

- **Mathematical modeling:** The curriculum emphasizes mathematical modeling, including data collection, representation, interpretation, prediction, and simulation.
- **Access:** The curriculum is designed so that topics are accessible to all students, with methods for accommodating differences in student performance.
- **Graphics calculators:** This technology allows for multiple representations — numerical, graphical, and symbolic — and a focus on goals in which mathematical thinking is central.
- **Active learning:** CMIC offers rich problem situations that involve students in investigating, conjecturing, verifying, applying, evaluating, and communicating mathematical ideas.
- **Multi-dimensional assessment:** Student progress is assessed through both curriculum-embedded and supplementary assessment procedures.

## Results

Both CPMP Course 1 and Course 2 students in 33 schools in 11 states outperformed comparison students on the math subtest of the Iowa Tests of Educational Development. Compared to a nationally representative norm group, CPMP students also exhibited greater mathematical growth from the beginning of grade 9 to the ends of grades 9, 10 and 11. Course 3 students outperformed a representative sample of 12<sup>th</sup> graders on NAEP math assessments.

On project-developed post-tests focusing on algebraic and geometric skills, Course 1 and Course 2 students outperformed the comparison group on conceptual, application, and problem-solving tasks. On tasks assessing algebraic procedures, Course 1 students performed somewhat below the comparison group, but this difference had disappeared by the end of Course 2.

## Implementation Assistance

- **Project Capacity:** Summer workshops for teachers are available for each course level at Western Michigan University (WMU) and at regional sites established by Everyday Learning Corporation.
- **Faculty Buy-In:** Changes in content priorities and emphases, instructional materials, and assessment methods call for strong school and community commitment.
- **Initial Training:** Five-day summer workshops at WMU feature hands-on experience with curriculum materials and parent involvement strategies. Project staff and new CMIC teachers discuss initial implementation results at a weekend session in November. Customized on-site workshops can be arranged through the Everyday Learning Corporation. CPMP also hosts a professional development institute for math educators who provide professional development for districts implementing the CMIC curriculum.
- **Follow-Up Coaching:** Telephone consultation is provided to sites, most of which are in their first year, and participants are encouraged to attend the workshop for the next course. Many sites also receive support through local improvement initiatives.
- **Networking:** An annual conference brings participants together, and they also interact via e-mail. The publisher disseminates a newsletter called *Math Link*.
- **Implementation Review:** Field test sites and those involved in the project's longitudinal study are involved in implementation review with project staff.

## Costs

For each of the four published courses, materials are \$47 per student and \$200 for teachers. Students need access to graphics calculators, and calculator software and software guide for each course costs \$38. Programs may be downloaded to all student calculators, but the first download is from a computer utilizing a Linking connector.

In addition to transportation to Kalamazoo, Michigan, for training, each teacher's participation will cost \$450 for a five-day workshop (including activities, materials, and lunches). Housing is available in dormitories as well as local motels. Many districts arrange for consultants to provide in-house professional development; experienced CPMP teachers available to conduct workshops can be reached through CPMP.

## Student Populations

CMIC is now being used in schools in at least 39 states — schools that vary from urban to suburban to rural, from affluent to blue-collar to low-income/high unemployment, and from white- or Hispanic-majority to 89% African-American.

## Special Considerations

Effective implementation requires study and planning time and provision for early involvement of all stakeholders. Contact the developer for recommended practices regarding stakeholder involvement, professional development, alternative assessments, technology, student placement, student grouping, and scheduling.

## Selected Evaluations

### Developer

Schoen, H. L., & Ziebarth, S. W. (1998). *Assessments of students' mathematical performance*. Iowa City: University of Iowa, Core-Plus Mathematics Project Evaluation Center.

Schoen, H. L., & Ziebarth, S. W. (1998). *Mathematical achievement on standardized tests*. Iowa City: University of Iowa, Core-Plus Mathematics Project Evaluation Center.

### Outside Researchers

None available.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Sitka High School 1000 Lake Street Sitka, Alaska 99835 907-747-3263 Contact: Cheryl Bach	459	small town	0%	28%	5%	3%	62%	82%	1%	3%
Bellevue High School 10406 SE Kilamock Street Bellevue, WA 98004 425-456-7111 Contact: Eric McDowell	1,192	mid-size city	2%	<1%	21%	3%	73%	M	9%	9%

Washington High School 2525 North Sherman Boulevard Milwaukee, WI 53210 414-444-9760 Contact: Eric Schluter	1,561	large city	89%	<1%	7%	1%	2%	71%	4%	7%
Sturgis High School 216 Vinewood Sturgis, MI 49091 616-659-1515 Contact: Craig Evans	897	rural	1%	<1%	1%	4%	93%	M	1%	5%
Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year. M = Missing data.										

### For more information, contact:

Beth Ritsema, Professional Development Coordinator  
 Core-Plus Math Project  
 Math Department  
 Western Michigan University  
 Kalamazoo, MI 49008  
 Phone: 616-387-4562  
 Fax: 616-387-4546  
 E-mail: [cpmp@wmich.edu](mailto:cpmp@wmich.edu)  
 Web site: <http://www.wmich.edu/cpmp>

# Growing with Mathematics (K-5)

IN BRIEF Growing with Mathematics	
<b>Founder</b>	Mimosa Publications
<b>Current Service Provider</b>	Wright Group/McGraw-Hill
<b>Year Established</b>	1990 (U.S.A.)
<b># Schools Served (5/1/01)</b>	1,250
<b>Level</b>	K-5
<b>Primary Goal</b>	to build a strong foundation for thinking and reasoning, computation, real-world applications, and use of language in concept development
<b>Main Features</b>	<ul style="list-style-type: none"> <li>• balances hands-on activities with computational reinforcement</li> <li>• develops concepts in depth</li> <li>• provides number sense activities to prepare students for success with computation</li> <li>• connects mathematics to other curriculum areas</li> <li>• is based on NCTM standards</li> </ul>
<b>Impact on Instruction</b>	uses of a wide variety of teaching strategies
<b>Impact on Organization/Staffing</b>	none
<b>Impact on Schedule</b>	minimal impact: daily 45-minute mathematics block
<b>Parental Involvement</b>	parent video, parent workshops, home link letters, home link activities, note to parents on homework pages
<b>Technology</b>	no additional technology required; optional Internet and CD-ROM activities
<b>Materials</b>	complete classroom materials provided; supplementary materials available

language in the development of mathematical concepts. Accordingly, Growing with Mathematics is an activity-based, problem-solving approach to learning mathematics that incorporates computation and skill development as a major component, thus maintaining a balance between concepts and skills. Through a complete series of hands-on activities that encourage interaction and discussion, students explore, discover, and build meaning for mathematical knowledge, with both teacher and parent guidance. Emphasis is placed on content that encourages thinking and problem solving, and there is in-depth development of concepts. Computation and practice of skills are included daily so that students have a strong basis of understanding.

Growing with Mathematics provides an integrated approach to learning. The program makes connections:

- between different areas of mathematics, such as patterns, relationships, and functions
- to other curriculum areas
- to the real world

## Origin/Scope

Growing with Mathematics is based on research conducted by Calvin and Rosemary Irons at the Learning Assistance Center in Australia as well as the research that supported the development of the NCTM standards. Paul Trafton and Thomas Rowan, Chairperson and member of the K-4 committee that drafted the standards, were selected as authors along with the Irons. The K-2 model was published in 1990, and the K-5 version followed between 1995 and 1998. The program has been implemented in 1,250 schools across the U.S., several Department of Defense Dependent Schools, and over 15 foreign countries.

## General Description

The studies conducted by the Irons revealed the importance of building a strong foundation for thinking and reasoning skills, computational skills, the ability to apply mathematics, and the role of

- to the home, providing parent links in the materials and holding parent workshops

A major focus of the program is number sense, which is an integral part of all lessons on number and operations. A separate Number Sense strand builds from lesson to lesson through activities found at the beginning of each lesson. The program also provides tools that create a context for both oral and written communication to help develop understanding of mathematics concepts. Students often write to record information or explain their thinking. This emphasis on communication is designed to promote success in problem solving.

The program's learning goals are closely aligned with the NCTM Standards, both with respect to what and how students learn. Students' first encounter with learning goals is exploratory, involving use of materials, active engagement, and discussion of mathematical ideas. This kind of exploration makes the content goals accessible and provides the time and experiences necessary for students to learn successfully. Emphasis is placed on content that will help students become capable problem solvers and critical thinkers.

## Results

Data from numerous schools and districts, drawn from a variety of national, state, and local tests, show consistent growth across multiple years for students exposed to the Growing with Mathematics program. For example, in the Cleveland (Ohio) school district, where all K-3 students have used the program since 1993, the percentage of students passing the fourth grade Ohio Proficiency Test for Mathematics rose steadily from 1995 to 1998. Cleveland was the only large school district in the state that demonstrated growth every year across that period. On the grade six Connecticut Mastery Test, the percentage of sixth-grade students in the Montville School District who met the statewide goal rose from 46 percent in 1994 to 68 percent in 1997. Over the same span, the percentage of students statewide meeting the goal rose only from 46 percent to 54 percent. (Montville elementary students had been using the program since 1991.) At an elementary school in Washington state that adopted the program for K-3 students in 1993, percentile scores for fourth grade students on the CTBS total math battery rose from the 54<sup>th</sup> percentile in 1993 (prior to student exposure to the program) to the 74<sup>th</sup> percentile two years later.

Similar results have been documented at schools and districts in Colorado, Kansas, New York, Pennsylvania, and other states on the Metropolitan Achievement Test (MAT), the Stanford Achievement Test (SAT), and the Riverside Performance Assessment.

## Implementation Assistance

- **Project Capacity:** Mimosa has a close association with INSIGHT, an independent training company that provides consultants nationwide who are trained in general mathematics education as well as Growing with Mathematics. Many of the INSIGHT consultants have used the program, so they are able to provide first-hand knowledge to new teachers. INSIGHT is also available for staff development training on different content areas of mathematics, and they can be contracted to train district trainers for ongoing help.
- **Faculty Buy-In:** Although no formal buy-in is required, schoolwide buy-in obviously lays the foundation for success, since optimal results are achieved when students progress from one grade level to the next using the same program. Publisher's representatives will visit sites to speak to district mathematics coordinators and/or to conduct presentations to interested groups.

- **Initial Training:** For district-level adoptions, Mimosa provides days of training based on the amount of program materials purchased. Additionally, summer institutes are held for large adopting districts. For individual schools that adopt the program schoolwide, the company provides a minimum of five training days for teachers: two training days before the school year begins, and three training days during the first year, ideally spaced after 4, 8, and 12 weeks of implementation.
- **Follow-Up Coaching:** Beyond the three follow-up training days provided as part of the standard schoolwide implementation package, schools may schedule as many additional training days as they wish. Only consultant availability and site funds limit opportunities for continuous training.
- **Networking:** Mimosa maintains a list of current users nationwide who are available to discuss the program. The publisher also provides an e-mail address and toll-free number staffed with a program specialist who can assist users with post-training implementation questions. A Web site contains answers to frequently asked questions.
- **Implementation Review:** For sites that implement the program as a pilot, teachers complete a set of feedback forms and send them to the publisher. The publisher provides implementation support and makes recommendations for program improvement.

## Costs

Materials cost under \$1,000 per classroom for all levels except third grade, where the cost is \$1,136 per classroom. The sets contain everything needed for complete program implementation. Yearly material replacement costs average \$165 per classroom, based on a class size of 24. Optional consumable practice and homework books are available at an average cost of \$205 per classroom of 24 students.

For schoolwide adoptions, two days of initial training and three days of follow-up are included at no extra cost to the school. Additional days of training may be purchased for \$600 per trainer per day, plus expenses. Schools also need to figure in their own costs for professional development days for teachers.

## Student Populations

The program was designed to meet the educational needs of all socio-economic levels, different ethnic and racial populations, and male and female students. It serves core classes, gifted and talented, Title I, special needs, ESL, LEP, and bilingual students. A complete parallel program of instruction is available in Spanish for K-2 along with math books in Spanish for K-3. The program is used across the U.S. and in several American schools in Europe. Singapore selected the program to be used in all government kindergartens. Topics are designed to appeal to a diverse student population.

## Special Considerations

The content recommendations of Growing with Mathematics closely reflect the NCTM recommendations, current research on learning, and the experiences of schools in the U.S. and other countries. The program requires a strong commitment from teachers and more preparation than a traditional basal approach.

## Selected Evaluations

### Developer

[Cleveland City Schools: Ohio Fourth Grade Proficiency Test for Mathematics]. (1998). Unpublished raw data.

[Montville School District: Performance on Connecticut Mastery Test.] (1997). Unpublished raw data.

Unpublished data from other sites is available from the developer.

### Outside Researchers

None available.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Denison Elementary School 3799 West 33rd Street Cleveland, OH 44109 216-741-2916 Contact: Jacki Underwood	816	large city	23%	1%	1%	14%	61%	80%	1%	5%
Willcox Elementary 501 West Delos Street Willcox, AZ 85643 520-384-4211 Contact: Sue O'Connell	531	small town	1%	1%	1%	43%	54%	57%	25%	10%
Head O'Meadow Elementary 94 Boggs Hill Road Newtown, CT 06470 203-426-7670	572	rural	1%	1%	1%	1%	96%	3%	0%	7%
Chambers Primary School 9101 56th Street West University Place, WA 253-566-5650 Contact: Kaycie Hersey	355	urban fringe of large city	11%	1%	13%	6%	69%	11%	3%	16%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

## For more information, contact:

Ed Gregory  
Wright Group/McGraw-Hill  
155 East 91st Street, #9A  
New York, NY 10128  
Phone: 800-831-1688 or 212-831-1688  
Fax: 212-876-8273  
E-mail: [edward\\_gregory@mcgraw-hill.com](mailto:edward_gregory@mcgraw-hill.com)  
Web site: [www.growingwithmath.com](http://www.growingwithmath.com)

# Interactive Mathematics Program (9-12)

IN BRIEF	
Interactive Mathematics Program	
<b>Founder</b>	Diane Resek and Dan Fendel (San Francisco State University); Sherry Fraser and Lynne Alper (University of California, Berkeley)
<b>Current Service Provider</b>	National Implementation Center and various regional centers
<b>Year Established</b>	1989
<b># Schools Served (Jan. 1998)</b>	243
<b>Level</b>	9-12
<b>Primary Goal</b>	to make higher level mathematics accessible to more kinds of students
<b>Main Features</b>	<ul style="list-style-type: none"><li>integrated core curriculum that replaces the traditional mathematics sequence</li><li>focus on developing student understanding</li></ul>
<b>Impact on Instruction</b>	hands-on experiences; open-ended projects; cooperative learning; written and oral communication emphasized; manipulatives, models, and graphing calculators
<b>Impact on Organization/Staffing</b>	starts with at least two teachers who must share planning time
<b>Impact on Schedule</b>	none
<b>Parental Involvement</b>	many assignments require family involvement
<b>Technology</b>	daily use of graphing calculators
<b>Materials</b>	textbooks, teacher resource materials, manipulatives

what is traditionally taught in high school mathematics by offering units covering probability, statistics, discrete mathematics, and matrix algebra. It focuses on developing student understanding by using investigations, hands-on experiences, group learning, and open-ended projects. The idea is to make high-level mathematics more accessible to students with varied backgrounds and abilities. Other important features of the program include an emphasis on written and oral communication, daily use of graphing calculators, and a wide variety of assessment tools.

## Results

As part of its 1992-97 grant from the National Science Foundation, IMP is undergoing a five year evaluation conducted by the Wisconsin Center for Educational Research. The Center is analyzing data for IMP and non-IMP students at three sites across the country, looking at variables such as number and kinds of mathematics courses taken, standardized test scores, and grade point averages. The results, thus far, have shown that IMP students score as well as or better than traditional math students on the SAT, even though IMP students spend 20% less time on the topics covered on that test. IMP students outscore their traditional counterparts when it

## Origin/Scope

The Interactive Mathematics Program (IMP) began in 1989. Directed by Diane Resek and Dan Fendel, mathematics professors at San Francisco State University, along with Sherry Fraser and Lynne Alper, mathematics teachers at the University of California, Berkeley, the program was originally piloted in three schools in California. It has since expanded to 243 schools across 21 states, and is currently being implemented in French-speaking Canada.

## General Description

IMP is a four-year high school core mathematics curriculum intended to replace the traditional Algebra 1 → Geometry → Algebra 2 → Trig/PreCalculus sequence. It consists of 20 units, 5 per year, which are integrated and problem-centered. The content goes beyond

comes to probability, statistics, problem solving, and quantitative reasoning. There is also evidence to show that IMP students take more math and have higher overall grade point averages.

## Implementation Assistance

- **Project Capacity:** The program is coordinated by a main implementation center in California and supported by regional centers in Arizona, California, Colorado, Hawaii, Illinois, Massachusetts, Minnesota, New York, Oregon, Pennsylvania, Nova Scotia, and New Brunswick.
- **Faculty Buy-In:** Normally, at least two math teachers work together to begin implementing IMP. It is suggested that at least 50% of the math teachers in the department be supportive of the program. New teachers are added each year as the school moves to the next level of IMP.
- **Initial Training:** Training varies with each regional center. Generally, five days of up-front summer training are required to begin each level of IMP.
- **Follow-Up Coaching:** Three to five days of follow-up training are offered mid-year. Many of the regional centers have funding and staff to provide regular classroom visits, observations, and support to IMP teachers and school sites.
- **Networking:** Every regional center has its own networking structure. At the national level, there is an IMP newsletter called *IMPressions*, a Web site, and an IMP Listserv.
- **Implementation Review:** When IMP first made its way into schools across the country, the founding directors and teacher leaders made trips to new school sites to support teachers and staff with implementation. That role is now taken over by the regional centers, their directors, and their support staff.

## Costs

Costs vary from regional center to regional center and from school to school, depending on resources available. Teacher training is estimated at \$500 per teacher for five days of summer training (not including room, board or travel expenses); \$200 per teacher for winter training; and any substitute costs associated with winter training. Required materials include class sets of graphing calculators (TI-82 or TI-83 at approximately \$90 apiece); student texts (approximately \$36 apiece); and teacher resource materials (free with an order of 25 texts.) Additionally, various manipulatives and classroom supplies are needed. The total cost to outfit an IMP classroom is estimated at \$500-\$1,000, depending on what is already available. In terms of staff support, IMP teachers require regular professional collaboration time with their partner teacher. This ranges from extra prep periods to stipends for weekly meetings.

## Student Populations

IMP has been implemented in a wide variety of schools with diverse student populations ranging from academic magnet schools to general comprehensive high schools to urban schools with high proportions of minority students, second-language students, and below-grade-level students. IMP has been translated and is available in Spanish, French, and one native Hawaiian language.

## Special Considerations

This program is very different from what most people remember of their high school math experience. As a result, there must be a concerted effort to educate and gain the support of administrators, counselors, parents, and community members. In addition, teachers of IMP are asked to drastically change their teaching practices, their role, and perhaps their view of mathematics and what students are capable of doing.

## Selected Evaluations

### *Developer*

Alper, L., Fendel, D., Fraser, S., & Resek, D. (1995). Implementing the professional standards for teaching mathematics: What is it worth? *The Mathematics Teacher*, 88(7), 598-602.

### *Outside Researchers*

Webb, N. (1996-97). Mathematics curriculum boosts performance. *Wisconsin Center for Education Research Highlights*, 8(4).

## Sample Sites

No sample site data available.

## For more information, contact:

Janice Bussey  
The Interactive Mathematics Program  
2420 Van Layden Way  
Modesto, CA 95356  
Phone: 888-628-4467  
Fax: 209-575-2750  
E-mail: [jbimp@telis.org](mailto:jbimp@telis.org)

# MATH Connections®: A Secondary Mathematics Core Curriculum (9-12)

IN BRIEF <b>MATH Connections</b>	
<b>Founder</b>	Connecticut Business and Industry Association
<b>Current Service Provider</b>	MATH Connections Implementation Center
<b>Year Established</b>	1992
<b># Schools Served (5/1/01)</b>	144
<b>Level</b>	9-12
<b>Primary Goal</b>	to provide a core curriculum that opens the concepts of higher mathematics to all students
<b>Main Features</b>	<ul style="list-style-type: none"><li>• 3-year core curriculum</li><li>• thematic, concept-driven approach</li><li>• integrates higher mathematics concepts</li><li>• emphasizes connections between mathematics and other disciplines and between mathematics and the real world</li></ul>
<b>Impact on Instruction</b>	requires graphing calculators
<b>Impact on Organization/Staffing</b>	must be implemented with at least two teachers working and planning together
<b>Impact on Schedule</b>	none
<b>Parental Involvement</b>	school districts are encouraged to introduce MATH Connections to parents at meetings facilitated by program facilitators
<b>Technology</b>	graphing calculators for students; one TI view screen master calculator
<b>Materials</b>	textbooks, teacher resources, blackline masters, and assessments

## Origin/Scope

MATH Connections is a project undertaken with a five-year \$4.1 million National Science Foundation grant awarded in 1992 to the Connecticut Business and Industry Association (CBIA) Education Foundation. As of May 2001, MATH Connections had been adopted by 144 schools.

## General Description

The overall mission of MATH Connections was to develop a core curriculum for grades 9-12 that opens the concepts of higher mathematics to all students and inspires new interest and excitement in mathematics for both students and faculty. MATH Connections was created by a diverse team of curriculum developers: mathematicians; scientists; educators in the fields of math, science, and technology; and business people.

MATH Connections is a three-year core curriculum, usually used in grades 9-11 or 10-12. The curriculum integrates the concepts of higher mathematics — such as algebra, geometry, probability, statistics and trigonometry — into a package that is interesting for all students. The project uses the National Council of Teachers of Mathematics (NCTM) standards as a guide for student performance, teacher professional development, and alternative student assessment. Technology is integrated into the curriculum with graphing calculators and computers, which students use to investigate concepts in greater depth and breadth, make conjectures, and validate findings.

MATH Connections uses a common thematic thread that blends many mathematical topics that traditionally have been taught separately to emphasize the interconnectedness among mathematical ideas. The project is built around connections, including those between

mathematics and the real world of people, business, and everyday life; between mathematics and science; and between mathematics and other subjects such as history, geography and language arts. The project focuses on four aspects of mathematics: (1) mathematics as problem-solving, (2) mathematics as communication, (3) mathematics as reasoning, and (4) mathematics as making connections.

Each of the three years of the program is built around a general theme that serves as a thread for the topics covered. The three themes are Data, Numbers, and Patterns; Shapes in Space; and Mathematical Models. *MATH Connections* is divided into a series of six half-year-long textbooks. The 100+ assessments built into the curriculum include written, oral, and demonstration formats. In addition to assessing students' ability to perform standard procedures, such as solving equations, the assessments also measure students' approach to non-routine problems taken from the real world and their understanding of mathematics concepts and how they relate to each other.

## Results

The first group of five schools field testing *MATH Connections* indicate increased student achievement and an increased positive attitude towards mathematics. One study compared two classes of students in a suburban high school whose mean test scores in eighth grade were essentially equivalent. By the end of tenth grade, *MATH Connections* students were found to have significantly higher scores. Another external evaluator found that 53% of *MATH Connections* students met or exceeded the state goal of 266 on the Connecticut Academic Performance Test, while 43% of non-*MATH Connections* students met the same goal. In a third study, *MATH Connections* was found to have a positive effect on students' confidence levels in learning mathematics and on their perceptions of its usefulness.

## Implementation Assistance

- **Project Capacity:** *MATH Connection*'s publisher, IT'S ABOUT TIME, is augmenting the present staff with a national corps of professional educators, trained by *MATH Connections* staff. They also are working with universities around the country to set up regional centers for teacher training in Leadership Institutes. These regional centers will be at teaching universities, working in conjunction with *MATH Connections* staff.
- **Faculty Buy-in:** During the field testing stage, *MATH Connections* has required buy-in from the superintendent, principal, and math chair. They also require a minimum of two teachers teaching two classes and having the same planning period. While they can work with more than two teachers per school, two is the minimum for the program to be successful.
- **Initial Training:** *MATH Connections* holds Summer Leadership Institutes, as well as institutes throughout the year, for teachers and administrators in schools adopting the *MATH Connections* curriculum.
- **Follow-up Coaching:** Follow-Up Academic Leadership Institutes are held on designated Saturdays throughout the school year to ensure that teachers receive instructors' support and opportunities to share their experiences with the curriculum. Regional centers also will provide support on an as-needed basis.
- **Networking:** A newsletter keeps administrators, teachers, and business partners apprised of events related to the project. All project teachers have access to the electronic communications network housed at the Talcott Mountain Science Center in Hartford,

Connecticut. E-mail, telephone, and an Internet Web site provide additional support by MATH *Connections* staff and provide for teacher-teacher interaction.

- **Implementation Review:** Site visits are conducted on a regular basis by MATH *Connections* staff and master instructors.

## Costs

Textbooks cost \$49.95 per student, plus \$99.95 for the Teachers' Resource package, which includes the teachers' edition, teacher commentary (which provides professional development on mathematics), black-line masters, and a set of Form A student assessments. Additional costs include one classroom set of graphing calculators (\$69-\$89 per student), one TI view screen master calculator (approximately \$300 per classroom), and one overhead projector (approximately \$150 per classroom). There may be a cost (shared with the publisher) for professional development, depending on the number of teachers and administrators participating.

Ancillary materials are available, including additional student assessments (\$91.90 per grade); supplemental problem-solving materials and skill activities (\$99.90 per grade); student workbooks (\$4.95 per student per year); test banks (\$32.90 per grade); and Extensions, or collections of problems, simulations, and projects (\$49.90 per grade).

## Student Populations

MATH *Connections* serves a diverse population, having been field-tested in inner-city, urban, suburban, and rural school districts with African-American, Hispanic, and Caucasian students. Year I of the curriculum has served eighth grade honor students who then continue the program in high school. The program also has served students for whom English is a second language; special education students who have been mainstreamed; and, in one school, special education students in a self-contained class.

## Special Considerations

The developers suggest that teachers and students have access to computers, e-mail, and the Internet.

## Selected Evaluations

### *Developer*

None available.

### *Outside Researchers*

Leinwand, S. (1996, July 6). Capturing and sharing success stories. *NCSM Newsletter*, 25(4).

## Sample Sites

No sample site data available.

## For more information, contact:

June G. Ellis  
MATH Connections Implementation Center  
750 Old Main Street, Suite 303  
Rocky Hill, CT 06067  
Phone: 860-721-7010

Fax: 860-721-7026

E-mail: mathconx@aol.com or jellis@mathconnections.com

Web site: <http://www.mathconnections.com>

# University of Chicago School Mathematics Project (K-12)

IN BRIEF	
University of Chicago School Mathematics Project	
<b>Founder</b>	University of Chicago School Mathematics Project
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1983
<b># Schools Served (Jan. 1998)</b>	approximately 4 million students
<b>Level</b>	K-12
<b>Primary Goal</b>	to improve the performance and participation levels of the vast majority of students K-12
<b>Main Features</b>	<ul style="list-style-type: none"><li>• K-12 mathematics curriculum</li><li>• use of applications, readings, problem solving, and technology to lay groundwork for depth and breadth of mathematics understanding</li></ul>
<b>Impact on Instruction</b>	prescribed curriculum
<b>Impact on Organization/Staffing</b>	none
<b>Impact on Schedule</b>	none
<b>Parental Involvement</b>	Home Links: materials for parents of elementary students that promote review and enrichment
<b>Technology</b>	calculators or graphing calculators (depending on the grade) and/or computers must be available for students' use
<b>Materials</b>	wide range of materials for grades K-12

## Origin/Scope

The University of Chicago School Mathematics Project, founded in 1983 by an organization of the same name, offers a complete mathematics curriculum and materials for teachers for grades K-12. It is now being used by approximately four million students throughout the 50 states, Puerto Rico, and abroad.

## General Description

The University of Chicago School Mathematics Project (UCSMP) seeks to improve mathematics education for the vast majority of students in grades K-12. The project began by researching the teaching of mathematics through real life applications, including the examination of mathematics curricula taught in other countries.

UCSMP has gone on to develop innovative materials for the teaching of mathematics as well as teacher training programs. It continues to engage in extensive evaluations of its own work. UCSMP develops its materials with several key goals in mind: to update mathematics curricula, to upgrade student achievement, and to increase the number of students continuing their mathematics education beyond algebra and geometry.

The project has three major components: elementary, secondary, and resource development. UCSMP materials, including textbooks, teacher resource kits, and workbooks, are published by the Everyday Learning Corporation and Scott Foresman-Addison Wesley. Translations of foreign textbooks and evaluation reports are published by the project, by the National Council of Teachers of Mathematics (NCTM), and by the American Mathematical Society.

UCSMP's K-6 curriculum helps children make the transition from intuition and concrete operations to abstractions and symbol processing skills. In the early stages of this curriculum, the program emphasizes playful, verbal interactions and manipulative activities. This helps create a mathematics-rich atmosphere in the classroom and helps lay the groundwork for a greater breadth and depth of mathematical understanding. The curriculum in UCSMP's secondary texts

(grades 6-12) stresses the use of applications, readings, problem solving, and technology. Both the elementary and secondary components of UCSMP actively involve teachers in the writing of their materials.

## Results

Results from studies on grades K-6 (Everyday Mathematics) show that students do as well on computation and much better in areas traditionally underrepresented in the elementary school curriculum, such as mental computation, geometry, data and graphing, and fractions. Study teachers report that students are much better at reasoning, problem solving, and communication, and show a better mathematical understanding than students of previous years. Teachers also rate the curriculum highly on meeting the goals of the NCTM standards. Individual results are available for each of the six UCSMP secondary courses. In general the results show that compared to non-UCSMP students, UCSMP students score as well on traditional tests and quite a bit higher on problem solving and applications tests.

## Implementation Assistance

- **Project Capacity:** National center located at University of Chicago; the project has unlimited capacity.
- **Faculty Buy-In:** There are no requirements for formal or informal commitment on the part of school faculty. However, because UCSMP materials are not like traditional materials, it is important for school districts to provide sufficient inservice training on the newer ideas incorporated in them.
- **Initial Training:** For the elementary materials, inservice conferences for new and experienced users of the materials are held in locations throughout the country at various times during the year. For the secondary materials, there is a conference each autumn which is open to all and a conference each August which is open to users of the materials in the upcoming year. Upon adoption, an initial inservice meeting in the adopting district, staffed by trained UCSMP consultants, may be arranged through the publishers of the project's materials (Scott Foresman-Addison Wesley and the Everyday Learning Corporation).
- **Follow-up Coaching:** Follow-up meetings can be scheduled when necessary based on consultant availability.
- **Networking:** Annual project brochure, newsletter twice a year, and conferences; Internet discussion groups and Web site under development.
- **Implementation Review:** Teachers work closely with UCSMP staff, attend training and review meetings, submit lesson plans for review, communicate by telephone and e-mail, and allow UCSMP staff to observe classes, discuss difficulties, and interview and test students.

## Costs

The costs for adopting a UCSMP course are comparable to the costs of purchasing textbooks and other teacher resource materials from a major publisher. Contact the developer for actual costs.

## **Student Populations**

The UCSMP has been used in rural, urban, and suburban communities and has served students of various races, ethnic backgrounds, and income levels.

## **Special Considerations**

None.

## **Selected Evaluations**

### **Developer**

The following evaluations, among others, are available from the UCSMP:

*Formative evaluation of kindergarten Everyday Mathematics (1986-87).*  
*Teaching and learning algebra: An evaluation of UCSMP algebra (1988-89).*  
*A field test of fourth grade Everyday Mathematics (1993-94).*  
*Third grade Everyday Mathematics students' performance on the 1993 and 1994 Illinois State Mathematics Test (1994-95).*  
*A follow-up to the fifth grade field test of Everyday Mathematics: Geometry and mental and written computation (1995-96).*

### **Outside Researchers**

None available.

## **Sample Sites**

UCSMP has hundreds of sites all over the country. It tries to match site locations with the specific needs of the teacher or school inquiring about the project.

## **For more information, contact:**

Carol Siegel  
University of Chicago School Mathematics Project  
University of Chicago  
5835 South Kimbark  
Chicago, IL 60637  
Phone: 773-702-1130  
Fax: 773-702-3114  
E-mail: [cssiegel@midway.uchicago.edu](mailto:cssiegel@midway.uchicago.edu)

# **Science Models**

200

20'7

# Developmental Approaches in Science, Health and Technology (DASH): K-6

IN BRIEF	
Developmental Approaches in Science, Health and Technology (DASH)	
<b>Founder</b>	Curriculum Research & Development Group, University of Hawaii at Manoa
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1987
<b># Schools Served (5/1/01)</b>	2,978
<b>Level</b>	K-6
<b>Primary Goal</b>	engage all students in learning about science by bringing the working worlds of scientists and technologists into the classroom
<b>Main Features</b>	<ul style="list-style-type: none"><li>constructivist, inquiry-based approach</li><li>students generate products for each lesson that go into portfolio</li><li>integrated science curriculum grouped around themes</li><li>continual assessment including student self-assessment</li></ul>
<b>Impact on Instruction</b>	use of effective inquiry teaching skills; integrating assessment with instruction
<b>Impact on Organization/Staffing</b>	local coordinator required on district or school level
<b>Impact on Schedule</b>	none
<b>Parental Involvement</b>	family component stresses relevance of material; newsletter suggests ways parents can reinforce student learning
<b>Technology</b>	no new technology required
<b>Materials</b>	teachers and administrator guides; classroom materials; extensive listing of trade books that support the material

## Origin/Scope

DASH was created by the University of Hawaii Curriculum Research and Development Group in collaboration with a consortium of universities and associated school districts across the country. DASH began in 1987 and, as of May 2001, had been used by almost 3,000 schools.

## General Description

DASH provides a comprehensive, integrated, inquiry-based program in science, health, and technology for grades K-6. Students with a wide range of backgrounds, learning styles, and abilities learn concepts and skills through authentic technological and scientific exploration, invention, and explanation. The sequential, spiral curriculum reflects both children's acquisition of concepts about how the world operates and the historical development of the sciences. DASH also connects school studies to the world of daily living, reinforcing lessons and allowing students to apply what they learn.

DASH students are technologists and scientists working with and making sense out of natural and, eventually, experimental phenomena. Seventy-five to 80% of student time is involved in hands-on activity, with the remainder spent reflecting, recording, and reporting. Over 650 interconnected activities progressively support students' construction of the basic concepts and skills of science, health, and technology. For instance, studies in the science component for grades K-3 engage students in observing, categorizing, and generalizing about the natural world (weather, plants, animals, and astronomy). From grade 4 on, students meet anomalies that stimulate them to experiment, create research designs, and test their own hypotheses.

The program is organized thematically at each grade level into 10 clusters, such as Food and Nutrition, Energy and Communication, and Matter, Space and Construction. Assessment is built into each lesson, is shared between teacher and student to develop self-assessment capacity, and includes student-generated products that go into student portfolios. The use of student research teams fosters collaborative learning. Science kits are not used; instead, students make much of their own equipment through readily available and recyclable materials, reducing costs and increasing students' sense that science learning is accessible.

DASH addresses the standards and goals for science education set by the National Research Council, the American Association for the Advancement of Science, and the National Center for Improving Science Education.

## Results

A four-year study showed that DASH students improved achievement in a number of areas, including knowledge and understanding of important concepts and skills in science, health and technology, and the ability to integrate and apply their learning to other content areas and their own lives. DASH students also demonstrated proficiency in investigative skills, taking and sharing responsibility for their own learning and classroom operations, and using cooperative learning strategies when appropriate. DASH teachers changed their attitude and approaches toward elementary science in ways that resulted in increased emphasis on science and improved focus on student learning.

## Implementation Assistance

- ***Project Capacity:*** Fourteen universities across the U.S. provide a range of services for DASH teachers. They are supplemented by a nationwide cadre of certified DASH trainers. In addition, the local education agency for schools implementing DASH designates a local coordinator, who receives additional instruction to become the in-house advocate for standards-based science reform.
- ***Faculty Buy-In:*** Teacher training is preceded by outreach with school personnel and a commitment-building process that includes site visits, presentations on standards- and research-based curriculum and methodology, data gathering, and detailed suggestions for implementing DASH at the site. No formal buy-in is required.
- ***Initial Training:*** The Curriculum Research and Development Group (CRDG) requires teachers to participate in a 10-day, 70-hour institute prior to implementing DASH. Teachers go through the entire program at the grade level they intend to teach. The program also assists administrators in implementing DASH through workshops, consultations, and an administrators' guide.
- ***Follow-Up Coaching:*** CRDG offers an extensive program of follow-up services for teachers. The local coordinator, with support from CRDG, provides frequent classroom coaching and science team meetings the first year. Long-term institutionalization includes professional development seminars, network support, and a teacher-as-researcher component, in which teachers collect, analyze, and publish findings on classroom activities leading to student improvement.
- ***Networking:*** CRDG provides ongoing professional development support through a toll-free phone number and the Internet (electronic newsletters, e-mail questions and answers, a Web site). Teacher institutes include mastery of these networking skills as a key feature for ongoing professional development.

- **Implementation Review:** The local coordinator, with support from CRDG, monitors implementation progress through observation, discussion, and teacher surveys. The local coordinator uses the data to make adjustments, provide support, and give feedback for ongoing improvement.

## Costs

The costs of initial teacher training and classroom materials are \$775 per teacher, with a 20-teacher minimum (costs for less than 20 teachers are negotiated). Costs for supplemental story books are as follows: primary grades, \$342 for a set of 20; grade four, \$60 for a set of 15; and grade five, \$360 for a set of 60. No special equipment is required; the start-up cost for local purchase items is approximately \$200 per class, with subsequent annual replacement averaging \$100. A two-year support program that includes videos and syllabi for monthly meetings is \$100 per teacher. Additional costs are teacher time for training and the allocation of a local coordinator (often districtwide).

## Student Populations

DASH is designed for heterogeneous student groups, consistent with the program's philosophy that science should be accessible for all and that technology and science have been built by people of vastly diverse talents. DASH has been used successfully by a wide spectrum of students.

## Special Considerations

There are many home extensions of in-class work, including research and parent contact to expand the experience of the classroom. The program offers a parent newsletter to communicate with parents what is happening in school.

## Selected Evaluations

### *Developer*

Curriculum Research and Development Group. (1993). *Developmental Approaches in Science, Health and Technology (DASH): A report of seven case studies assessing the effects of students and teachers*. Honolulu: University of Hawaii.

### *Outside Researchers*

None available.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Dr. Martin Luther King Community Magnet 401 East Castle Street Syracuse, NY 13205 315-435-4580 Contact: Carol Jones	515	mid-size city	95%	0%	<1%	2%	1%	87%	0%	11%
Donaldsonville Elementary 38210 Highway 3089 Donaldson, LA 70346 225-474-2720 Contact: Mary Chauff	700	urban fringe of mid-size city	87%	0%	2%	0%	11%	90%	0%	25%
Sacred Heart School 501 St. Louis Street Florissant, MO 63031 314-831-3390 Contact: Sue Giescko	397	urban fringe of large city	2%	0%	1%	1%	96%	0%	0%	6%
Evergreen Elementary 1111 McGarigle Road Sedro Woolley, WA 98284 360-855-3545 Contact: Sue Peebles	547	small town	1%	5%	1%	7%	87%	47%	4%	15%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

### For more information, contact:

Donald B. Young  
Curriculum Research & Development Group  
University of Hawaii at Manoa  
1776 University Avenue  
Honolulu, HI 96822  
Phone: 800-799-8111  
Fax: 808-956-6730  
E-mail: [crdg@hawaii.edu](mailto:crdg@hawaii.edu)  
Web site: <http://www.hawaii.edu/crdg>

## Foundational Approaches in Science Teaching (FAST): 6-8

IN BRIEF	
Foundational Approaches in Science Teaching (FAST)	
<b>Founder</b>	Curriculum Research & Development Group, University of Hawaii at Manoa
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1971
<b># Schools Served (5/1/01)</b>	3,986
<b>Level</b>	6-8
<b>Primary Goal</b>	prepare scientifically literate students who can participate in the transactions of a science-and technology-based society
<b>Main Features</b>	<ul style="list-style-type: none"><li>inquiry-based curriculum</li><li>student-designed projects</li><li>course material designed for wide spectrum of ability levels</li><li>strategies for multi-dimensional assessment</li></ul>
<b>Impact on Instruction</b>	standards-based approach to content; use of constructivist theory and a broad array of instructional strategies
<b>Impact on Organization/Staffing</b>	local coordinator required on district or school level
<b>Impact on Schedule</b>	classes require minimum of 45 minutes
<b>Parental Involvement</b>	no specific components
<b>Technology</b>	no new technology required
<b>Materials</b>	teacher, instructional, and evaluation guides; sets of classroom materials

### Origin/Scope

Since 1971, over three million students have taken one or more years of the FAST program, and almost 4,000 schools have used FAST. It is also taught in 10 foreign countries. FAST was created in 1967 by the Curriculum Research and Development Group of the University of Hawaii.

### General Description

The Foundational Approaches in Science Teaching (FAST) program is a sequence of three inquiry science courses especially designed for middle-school students. The courses emphasize the foundational concepts and methods of the physical, biological, and earth sciences. Student investigations are organized into three strands called physical science, ecology, and "relational study," which integrates

the study of science, technology, and society. The goal of FAST is to develop scientifically literate students who have both the background necessary for understanding environmental concerns in our technological society and basic tools for further study in science. The main objectives are to develop relevant thinking skills, laboratory skills, and knowledge of core science concepts.

FAST students develop a scientific world view by doing science — generating questions, designing and carrying out experiments, collecting and analyzing data, researching, drawing conclusions based on evidence, writing reports, and communicating findings. Students work in small collaborative groups that function as research teams, becoming producers rather than only receivers of information. The teacher is the research director and coordinator, a colleague who stimulates and facilitates ever deeper probing into problems. Through the process of inquiry and research, student teams generate the theoretical content of the program.

As scientists, students design many of their own experiments. In a physics unit, for example, students formulate theoretical models of heat and light and test their models. They also invent and build tools and instruments for some investigations. As technologists, students apply

recently mastered scientific principles, such as the concepts of buoyancy and density in designing and constructing a working model of a submarine. By experiencing multiple roles (scientist, engineer, technologist, politician, and citizen), students practice and reinforce skills from many areas, including math, written and oral communications, and social studies.

FAST meets the standards and goals for science education set by the National Research Council, the American Association for the Advancement of Science, and the National Center for Improving Science Education.

## Results

In several impact evaluation studies, FAST students have outperformed non-FAST students in a number of areas. FAST students have demonstrated significantly higher science achievement on CTBS and the California Achievement Test, significantly higher performance on basic thinking and problem-solving skills (CTBS), significantly higher gains in manipulative laboratory skills (Laboratory Skills Test), and significantly higher creative thinking skills (Torrance Tests of Creative Thinking). Results were consistent for all FAST students, regardless of gender, learning style differences and ability. A 1977 comparison study on the program's long-range effects showed FAST students with higher achievement in biology, greater interest in science, and higher preference for inquiry-oriented study using critical questioning. Also, FAST was designated by the Educational Testing Service as one of two programs nationwide with the best comprehensive middle-school science curricula.

## Implementation Assistance

- ***Project Capacity:*** Fourteen universities across the U.S. provide a range of services for FAST teachers. They are supplemented by a nationwide cadre of certified FAST trainers. In addition, the local education agency for schools implementing FAST designates a local coordinator, who receives additional instruction to become the in-house advocate for standards-based science reform.
- ***Faculty Buy-In:*** Teacher training is preceded by outreach with school personnel and a commitment-building process that includes site visits, presentations on standards- and research-based curriculum and methodology, data gathering and detailed suggestions for implementing FAST at the site. No formal buy-in is required.
- ***Initial Training:*** The Curriculum Research and Development Group (CRDG) requires teachers implementing FAST to participate in a 10-day, 70-hour institute prior to teaching FAST. Participants receive a variety of instructional materials, including three guides (teacher, instructional and evaluation), student books and reference books.
- ***Follow-Up Coaching:*** CRDG offers an extensive program of follow-up services for teachers to ensure successful implementation. The local coordinator, with support from CRDG, provides frequent classroom coaching and science team meetings the first year. Long-term institutionalization includes professional development seminars, network support, and a teacher-as-researcher component, in which teachers collect, analyze and publish findings on classroom activities leading to student improvement.
- ***Networking:*** CRDG provides ongoing professional development support through a toll-free phone number and the Internet (electronic newsletters, Web site, e-mail questions and answers, etc.). Teacher institutes include mastery of these networking skills as a key feature for ongoing professional development.

- **Implementation Review:** The local coordinator, with support from CRDG, monitors implementation progress through observation, discussion, and teacher surveys. The local coordinator uses the data to diagnose the necessary adjustments, provide support as appropriate, and give feedback into the planning process for ongoing improvement.

## Costs

A 10-day teacher institute (20-teacher minimum) is required for each of the FAST courses: FAST 1 (The Local Environment); FAST 2 (Matter and Energy in the Biosphere); and FAST 3 (Change over Time). Institute fees are \$600-\$625 per participant. A one-year support program of monthly meetings, which costs \$100 per teacher, is recommended. Classroom sets of student materials required for implementation are \$1,372 for a set of 30 and can be shared by multiple classes. FAST 1 and 2 require an equipment building kit (\$175-\$255), and yearly equipment replacement costs are between \$100-\$200 per classroom. Additional costs are teacher time for training and the allocation of a local coordinator (often districtwide).

## Student Populations

FAST is designed as a science program for students in heterogeneous, untracked classes. The Educational Testing Service identified FAST as an exemplary program serving minority and female populations during the middle-school years. Separate studies have shown the effectiveness of FAST in teaching gifted and mildly disabled students as well.

## Special Considerations

FAST incorporates a wide variety of instructional strategies designed to address the different learning styles and developmental needs of students ages 12-15. Some of the instructional strategies appropriate for student investigations are cooperative/collaborative learning, whole group instruction, independent and self-directed learning, peer coaching, graphing, concept mapping, self-assessment, research, and simulations.

## Selected Evaluations

### Developer

FAST Project (1996). *A Summary of evaluations.*  
Honolulu: University of Hawaii, Curriculum Research & Development Group.

### Outside Researchers

Clewell, B. C., Thorpe, M. E., & Anderson, B. T. (1987). *Intervention programs in math, science, and computer science for minority and female students in grades four through eight.* Princeton, NJ: Educational Testing Service.

Dekkers, J. (1978). The effect of the junior high FAST program on student achievement and preferences in high school biology. *Studies in Educational Evaluation*, 3(1), 1-17.

Mattheis, F. E., & Nakayama, G. (1988). *Effects of a laboratory-centered inquiry program on laboratory skills, science process skills, and understanding of science knowledge in middle grades students.* Greenville, NC: East Carolina University.

Tamir, P., & Yamamoto, K. (1978). The effects of junior inquiry science programs on student cognitive and activity preferences in science. *Research in Science Education*, 8, 71-78.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Ontario Middle School 3560 Park Avenue West Mansfield, OH 44906 419-529-5507 Contact: Scott Caldwell	552	urban fringe of mid- size city	1%	0%	1%	<1%	97%	18%	M	M
Cambria Heights Middle School 280 Beaver Street Hastings, PA 16668 814-247-6271 Contact: Laura Fisanick	326	urban fringe of mid- size city	0%	0%	0%	0%	100%	22%	M	M
Woodmont Middle School 325 Flatrock Road Piedmont, SC 29673 803-299-8373 Contact: Linda Melcher	791	rural	28%	<1%	<1%	1%	70%	27%	M	M
Alderwood Middle School 20000 28th Avenue West Lynnwood, WA 98036 425-670-7579 Contact: Ruth Martin	758	large city	5%	3%	15%	4%	73%	15%	M	M

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year. M = Missing data.

### For more information, contact:

Donald B. Young  
 Curriculum Research & Development Group  
 University of Hawaii at Manoa  
 1776 University Avenue  
 Honolulu, HI 96822  
 Phone: 800-799-8111  
 Fax: 808-956-6730  
 E-mail: [crdg@hawaii.edu](mailto:crdg@hawaii.edu)  
 Web site: <http://www.hawaii.edu/crdg>

## GALAXY Classroom Science (K-5)

IN BRIEF GALAXY Classroom Science	
<b>Founder</b>	EMG GALAXY Classroom
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1993
<b># Schools Served (Jan. 1998)</b>	600+
<b>Level</b>	K-5
<b>Primary Goal</b>	improve science learning by all students through inquiry-based, "hands-on/minds-on" authentic curriculum
<b>Main Features</b>	<ul style="list-style-type: none"><li>global interactive network of elementary schools linked by satellite, fax, and Internet</li><li>15-minute video broadcasts</li><li>three one-year, theme-based science curricula</li><li>a one-year language arts curriculum</li></ul>
<b>Impact on Instruction</b>	teachers use technology, curriculum, and materials to engage students as scientists exploring phenomena, developing scientific thinking processes, and communicating findings
<b>Impact on Organization/ Staffing</b>	none
<b>Impact on Schedule</b>	schedule must accommodate satellite broadcasts
<b>Parental Involvement</b>	curriculum includes regular take-home component that teachers may use
<b>Technology</b>	satellite broadcast network, interactive audio conferencing telephone and fax technology
<b>Materials</b>	teachers' guide; student print materials, including bulletin featuring student input; science kits for hands-on investigations; bibliography of children's science literature

network of elementary schools, which are linked by satellite and computer technologies. GALAXY Classroom Science curricula consist of three one-year units: Fixer Uppers for grades one or two, S.N.O.O.P.S. for grades four or five, and (new for 1998-99) Finders, Seekers, Science Keepers for kindergarten or grade one. There is also a one-year language arts unit called The House for grades three, four, or five.

GALAXY Classroom Science seeks to improve science learning for all students by giving teachers tools to create learning environments that stimulate and nourish inquiry-based learning. Through the "hands-on/minds-on" curriculum, students learn specified core science concepts and practice using scientific thinking processes (e.g., observing, communicating, organizing and comparing). The science units are organized around themes that follow the National Science Education Standards on science concepts and processes appropriate for

### Origin/Scope

The GALAXY Classroom grew out of a 1990 initiative by GM Hughes Electronics, with later funding from the National Science Foundation, to create resources that would help teachers significantly improve learning in America's elementary schools. The effort combined an extensive array of telecommunications resources with many "best practices" in teaching and learning, including hands-on investigations using GEMS (Great Explorations in Math and Science) and FOSS (Full Option Science System) units originally developed at the Lawrence Hall of Science at the University of California, Berkeley.

In 1993-94, GALAXY Classroom began demonstration projects in 40 schools. As of January 1998, 600 schools nationwide are part of the GALAXY Classroom, with an additional 40 schools in Canada and two in Mexico.

### General Description

The GALAXY Classroom is an inquiry-based, student-centered curriculum and instructional approach supported by a global interactive

students at each level. Additional underlying principles include constructivist thinking, cultural diversity, authentic inquiry, relevance for all students, and connection to state and national standards to improve student performance.

The themes, such as Science Is Doing What-Ifs to Use and Compare Materials, are developed through television broadcasts and classroom hands-on activities. In each 15-minute video episode, a diverse group of children model for students how curiosity, observation, comparing, and problem-solving can help them construct knowledge about science from the content and context of their lives. Students in the classroom investigate questions posed by the episode and attempt to answer them through a variety of activities. Teachers facilitate and encourage student collaboration, open-ended exploration, testing of ideas, and active involvement in the process of discovery. Students then use fax or e-mail technology to communicate their findings to the television show and other students on the network. Student work is shared on the television show and in student bulletins sent to all GALAXY classrooms.

## Results

Independent comprehensive evaluations conducted of the initial demonstration phases of both science units found them "highly successful initiatives." For grade levels K-2, students in the GALAXY classroom showed a significant growth in curiosity (central to the development of scientific thinking processes) compared to their non-GALAXY peers. Most GALAXY students understood the concepts of the two themes, with almost half the students answering questions about one theme without making a single mistake. Teachers' personal experience and confidence in teaching science improved over a comparison group, and time spent teaching classroom science more than doubled for GALAXY teachers compared to the previous year.

S.N.O.O.P.S. students (grade levels 3-5) outperformed comparison groups in the use of scientific thinking processes, surpassing the next grade level in tests on classification abilities. The majority of GALAXY students demonstrated they understood the curriculum's core science concepts and could apply them in new contexts. GALAXY students showed more positive attitudes towards participating in science class than their counterparts. Teacher attitudes towards science teaching also improved. Teachers reported an increase in students' teamwork, communication, and writing skills as a result of working collaboratively and crafting detailed accounts of investigations and findings to fax to the network.

## Implementation Assistance

- **Project Capacity:** EMG GALAXY is the national center, located in Scottsdale, Arizona. There are also regional staff throughout the country and an extensive electronic network.
- **Faculty Buy-In:** No formal process. EMG GALAXY requires that teachers receive training and have access to the equipment and material (videos may be mailed if schools lack the satellite technology).
- **Initial Training:** Two-day training for all teachers using GALAXY Science. Training is usually conducted within 50 miles of a participating school. Teachers receive instructional guides as part of training.
- **Follow-Up Coaching:** EMG GALAXY provides a variety of support mechanisms, including periodic on-site coaching from regional staff, weekly planning calendars, teacher newsletters, updated curriculum resources on its Web site, and a toll-free number for teacher support. Additional teacher training is available via the program's satellite network.

- **Networking:** The program has an extensive networking system, including the satellite network, audio conferencing telephone, Web site, listserv, newsletters, a fax/phone/e-mail directory of all teachers, and a toll-free number for teacher support. The program suggests specific ways for classes to interact with other schools every two weeks. Teachers are expected to use fax or e-mail to encourage student communication and interaction.
- **Implementation Review:** Regional staff review implementation as part of periodic site visits. The program also tracks classroom participation by monitoring fax responses. It follows up with schools not using the fax technology to determine why the program is not being utilized fully and to provide assistance.

## Costs

The cost of GALAXY Classroom depends upon the number of enrolled schools and teachers. The average annual cost is \$15,000 per school including program subscription, Web site enrollment, on-line teacher support, student interactivity, teacher development institutes, and hands-on kits for all classrooms. The mandatory introductory teacher institute is offered for all teachers new to the program. Schools need a television and VCR as well as a fax and several computers with Web connectivity.

## Student Populations

GALAXY is designed to reach a diverse range of student populations to improve achievement in science by all students. In the pilot evaluation, 60%-70% of the GALAXY students were classified as "disadvantaged," with 20% Limited English Proficiency. GALAXY Science Classroom is broadcast in English, Spanish, and open-captioned for the hearing impaired.

## Special Considerations

GALAXY Science Classroom requires a shift for some teachers to an environment in which the teacher facilitates learning by collaborating with students as mutual explorers.

## Selected Evaluations

### Developer

None available.

### Outside Researchers

Guth, G., Austin, S., De Long, B., & Pasta, D. (1995).

*Evaluation of GALAXY Classroom Science for grades K-2: Final report.* San Francisco: Far West Laboratory for Educational Research and Development.

Guth, G., Austin, S., De Long, B., Pasta, D., & Block, C. (1995). *GALAXY Classroom Science evaluation for grades 3-5: Final report.* San Francisco: Far West Laboratory for Educational Research and Development.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Ealy Elementary 1810 Commerce Road West Bloomfield, MI 48328 248-738-3310 Contact: Paul Drummond	530	urban fringe of large city	12%	1%	9%	1%	78%	5%	M	M
Craycroft Elementary 5455 E. Littletown Road Tucson, AZ 85706 520-545-2628 Contact: Mike Bloker	455	rural	6%	2%	2%	60%	30%	M	M	M
Bill Arp Elementary 4841 Highway 5 Douglasville, GA 30135 770-920-4335 Contact: Sue Beck	486	urban fringe of large city	11%	1%	0%	1%	87%	24%	M	M
Marquez Elementary 16821 Marquez Avenue Pacific Palisades, CA 90272 310-454-4019 Contact: Laurie Wong-Farrell	653	large city	4%	6%	6%	8%	81%	7%	M	M

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.  
M = Missing data.

### For more information, contact:

Bill Schmitt  
Teacher Universe GALAXY Classroom  
2151 East Broadway Road, Suite 203  
Tempe, AZ 85282  
Phone: 800-303-9070, ext. 64  
Fax: 480-449-9009  
E-mail: [bschmitt@GALAXY.org](mailto:bschmitt@GALAXY.org)  
Web site: <http://www.galaxy.org>

## Iowa Chautauqua Program (K-12)

IN BRIEF Iowa Chautauqua Program	
<b>Founder</b>	Robert E. Yager
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1983
<b># Schools Served (1/1/99)</b>	143 in Iowa, 67 in 17 other states
<b>Level</b>	K-12 (emphasis on 6-10)
<b>Primary Goal</b>	to alter instruction of science teachers to enhance student learning
<b>Main Features</b>	<ul style="list-style-type: none"><li>• year-long professional development sequence</li><li>• use of National Science Education Standards</li><li>• constructivist approach</li></ul>
<b>Impact on Instruction</b>	student-centered instruction; cooperative learning; active scientific inquiry; focus on depth of understanding; attempts to link science to students' prior experience and to local situations and materials
<b>Impact on Organization/Staffing</b>	more teacher collaboration; more involvement of community
<b>Impact on Schedule</b>	collaboration in allotting time to meet school objectives; may lead to block scheduling
<b>Parental Involvement</b>	parents and others in community are identified as partners in learning
<b>Technology</b>	use of computer, Internet, and other advanced technology is encouraged
<b>Materials</b>	target curricula with reform goals and procedures

### Origin/Scope

The Iowa Chautauqua Program was initiated in 1983 as part of a 17-state project sponsored by the National Science Foundation. Initially the program involved only middle school teachers; five years after its inception, it enrolled early elementary as well as high school teachers. Most of the validation effort, however, has focused upon grades 4-10. The program has been implemented in 143 schools in Iowa and 67 schools in 17 other states.

### General Description

The Iowa Chautauqua Program is a year-long staff development sequence designed to help K-12 science teachers align their curriculum, instruction, and assessment with the vision embodied in the National Science Education Standards. The standards establish eight content areas for science education:

1. Unifying Concepts and Processes
2. Science as Inquiry
3. Physical Science
4. Life Science
5. Earth and Space Science
6. Science and Technology
7. Science in Personal and Societal Perspectives
8. History and Nature of Science

The program prepares teachers to pilot test short teaching units during the fall based on content standards in these areas. After additional collaboration and training (including action research projects), teachers working in teams develop and pilot longer instructional modules adapting curricular materials developed nationally (often with federal support). The eventual goal is the creation of a unified schoolwide science curriculum and assessment plan.

The Chautauqua program prepares teachers to use constructivist instructional strategies in the classroom. This means less emphasis on lecture, demonstration, memorization, and rigid adherence to curriculum. It means more emphasis on discussion, teacher collaboration, active inquiry, cooperative learning, continuous assessment of student understanding, and use of student experience and local issues as vehicles for learning.

## Results

The Iowa Chautauqua Program and its successor, the Iowa Scope, Sequence, and Coordination project, have been evaluated by outside evaluator teams, doctoral candidates, annual assessment reports, and studies in 10 states and 6 international settings. Most of these studies have focused on changes in teacher practice and attitude. Several, however, have examined student achievement in six domains of science learning: concepts, process skills, applications, creativity, world view, and attitude. In one study, for example, 15 lead teachers each taught one science class using the Chautauqua approach and another using a traditional textbook approach. Students (a total of 722) were randomly assigned to treatment and traditional classes. Pre-tests were given to students in September and post-tests in April. The type of test used varied from domain to domain. For example, the concept domain was assessed with multiple choice tests available from textbook publishers, the process domain with 13 skills identified by the American Association for the Advancement of Science, and the application domain by multiple choice items generated by program developers. The results revealed no difference between Chautauqua and control students in the concept domain (traditional science content); in the other five domains, however, Chautauqua students demonstrated significantly more growth than control students.

Other studies have found that female students in classrooms taught by Chautauqua teachers have more positive attitudes towards science than counterparts in traditional science classes. Studies have also demonstrated numerous positive effects on teachers, including better understanding of the nature of science and greater confidence in ability to teach it.

## Implementation Assistance

- **Project Capacity:** Four full-time coordinators in Iowa are available to help initiate new Chautauqua centers, and 29 leaders outside Iowa can assist with other developing programs. In addition, there are mentor teachers (nearly 50 in Iowa and almost as many in other areas) who are vital partners (usually one for 10-15 new teachers). Finally, there are potential trainers for the model across the U.S.
- **Faculty Buy-In:** An Awareness Afternoon is usually planned. The program works best when initial teachers opt in on their own. These teachers are often able to engage the rest of the faculty.
- **Initial Training:** The program organizes a sequence of training events over a year-long period. First, there is a two-week Summer Leadership Institute, which may be held onsite (for large districts), at a central site (in states where several schools or districts are involved), or at the University of Iowa (for sites from diverse locations). In all cases, experienced Chautauqua teachers are invited to assist with training. Second, there is a three-week Summer Training Institute that introduces new teachers from a given site to Chautauqua instructional strategies and helps them plan a five-day science unit. Organized by the leaders involved in Leadership Training, these institutes are held in Iowa or onsite if there are 20 or more teachers involved. Third, after new teachers have

piloted the unit, there is a 2½-day fall short course (held locally) where teachers develop month-long science modules. Finally, there is a 2½-day spring short course (also held locally) where teachers amass assessment data, review experiences with the modules, and plan next steps for expanding the program.

- **Follow-Up Coaching:** In addition to the fall and spring short courses, the local consultant for the project conducts two day-long sessions with the lead teachers during the year. Once a week, administrators, lead teachers, and parents from each building hold meetings for collection and consideration of assessment data. Throughout the year, lead teachers engage in action research projects.
- **Networking:** Throughout the first year, participating teachers have numerous opportunities at workshops and meetings to share experiences. Local consultants also provide a series of interim communications with central staff, lead teachers, and fellow participants, including a newsletter, special memoranda, and monthly telephone contacts. Finally, consultants plan a series of workshops to highlight pilot efforts as a way of interesting other schools and districts in the program.
- **Implementation Review:** Program staff conduct no formal implementation review. However, gathering data on teacher change and student achievement is built into the program. To help teachers with this process, program developers designed the *Iowa Assessment Handbook*, with sample assessment items addressing six domains of science.

## Costs

Costs vary considerably based on numbers of teachers and schools involved, distance for lead teachers and teacher participants, and location of leadership workshops (i.e., onsite or at the University of Iowa). Every attempt is made to keep travel costs low.

The Summer Leadership Institute usually involves 20 persons, including grade level teachers, scientists, and curriculum leaders. After leadership training, teams are organized to work with teachers onsite — usually 30 teachers. It works best to have one lead teacher for each 10 to 12 teacher participants for the three-week Summer Training Institute and the two short courses. Costs include:

- Summer Leadership Institute: \$10,500 for honoraria for the Chautauqua director, three experienced Chautauqua teachers, a scientist, and a state science consultant, plus expenses.
- Summer Training Institute: \$15,800 for the director, three lead teachers, two scientists, two state consultants, and two national curriculum materials experts, plus expenses.
- Fall and Spring Short Courses: \$8,500 each for honoraria for the director, two lead teachers, and a consultant, plus expenses.

Additionally, schools will need to cover expenses for teachers (including travel and substitutes).

It is possible to plan programs that involve fewer or greater numbers of teachers. It is important, however, that the program be viewed as continuous over a calendar year.

## Student Populations

Teachers are prepared to function in heterogeneous, non-tracked classrooms and to pay particular attention to the needs of female, minority, and low-achieving students. Several studies have shown that female students in Chautauqua programs perform better and like science more than female students in traditional science courses.

## Special Considerations

Teachers in the Chautauqua program must be open to constructivist teaching and learning principles. This means, among other things, that students work together, help define the content of programs, and are free to seek directions that interest them.

## Selected Evaluations

### Developer

None available.

### Outside Researchers

Iskandar, S. M. (1991). *An evaluation of the science-technology-society approach to science teaching*. Doctoral dissertation, University of Iowa.

Mackinnu. (1991). *Comparison of learning outcomes between classes taught with a science-technology-society (STS) approach and a textbook oriented approach*. Doctoral dissertation, University of Iowa.

Spake-Blunck, S. M. (1993). *Evaluating the effectiveness of the Iowa Chautauqua Inservice Program: Changing the reculturing practices of teachers*. Doctoral dissertation, University of Iowa.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./Alaskan	Asian Amer.	Hisp.	White			
Windham School RR #1 Box 27 Newfane, VT 05345 802-365-7651 Contact: Orly Munzing	57	rural	0%	0%	0%	0%	100%	M	M	M
Quaker Valley School 400 Chestnut Road Sewickley, PA 15143 412-749-3616 Contact: Dan Pellis	454	urban fringe of large city	6%	0%	1%	0%	93%	M	M	M
Sturgis Schools (K-9) 1230 Douglas Sturgis, SD 57785 605-347-2523 Contact: Barry Furze	27	small town	0%	2%	0%	2%	96%	94%	M	M
Charles City Comm. Schools 500 North Grand Avenue Charles City, IA 50616 515-257-6530 Contact: Janet Dunkel	461	rural	<1%	0%	1%	2%	97%	34%	M	M

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year. M = Missing data.

## For more information, contact:

Robert E. Yager  
Science Education Center  
769 VanAllen Hall  
The University of Iowa  
Iowa City, IA 52242

Phone: 319-335-1189  
Fax: 319-335-1188  
E-mail: robert-yager@uiowa.edu

## **Other Models**

## ACCESS (PreK-1)

IN BRIEF ACCESS	
<b>Founder</b>	Primak Educational Foundation
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1982
<b># Schools Served (5/1/01)</b>	3,117
<b>Level</b>	preK-1
<b>Primary Goal</b>	to provide a comprehensive early educational program that promotes intellectual, social, and language development utilizing a preventive approach to learning problems
<b>Main Features</b>	<ul style="list-style-type: none"><li>curricula in four areas</li><li>individually paced learning</li><li>extended curriculum range</li><li>diversity of activities</li><li>mixed instructional modes</li><li>development of positive self-concepts</li></ul>
<b>Impact on Instruction</b>	small-group instruction, more adult/child interaction, better knowledge of student needs and growth, awareness of daily objectives
<b>Impact on Organization/ Staffing</b>	appropriate use of paraprofessional help; involvement of parents
<b>Impact on Schedule</b>	teacher and paraprofessional planning time
<b>Subject-Area Programs Provided by Developer</b>	yes (particularly language, math, science, and perceptual-motor development)
<b>Parental Involvement</b>	parent workshops; parent involvement in home instruction; parent aides in classrooms
<b>Technology</b>	none required
<b>Materials</b>	teacher manuals; curriculum-based assessments; implementation kits including activities, manipulatives, picture files, video training tapes

varied learning needs. The program contains four main components: First Level Language (Kindersay), First Level Math (Kindermath), First Level Science (Kinder-Sci), and First Perceptions (Kindersee).

A curriculum-based assessment is used to determine each student's developmental level. Based on skills and development at entry, each child works through a series of activities to reach advanced objectives.

Understanding takes place through assimilation and the use of concrete objects rather than abstractions and rote memorization. With well-defined, step-by-step, closely sequenced levels and hands-on activities, the curriculum helps to determine children's needs and to

### Origin/Scope

The Primak Educational Foundation was formed in 1980 by a group of early childhood and special education professionals from West Chester University who had helped develop Project COPE (Cognitively-Oriented Pre-Primary Experience). The foundation was established to continue work associated with Project COPE, but as an upgraded program under a new name: ACCESS: A Comprehensive Curriculum for Early Student Success. The program has been implemented in more than 3,000 schools in 49 states, U.S. territories, and Department of Defense Dependents Schools in Europe.

### General Description

ACCESS is a sequentially programmed, pre-primary curriculum and management system that provides for individual growth and learning of basic skills. The program's wide range of activities and objectives makes it available for use with pre-primary children from varied socio-economic backgrounds and with

stimulate intellectual and language growth. Each level is a mini-lesson plan, complete with objective, materials, method, and evaluation. Children pursue the objectives through individualized, small group, and large group instruction as well as free inquiry situations. The program contains lessons in conceptual language, perceptual-motor, and math/science development, as well as in social studies, art/music, and health/safety. The oral language, perceptual-motor, and math materials are also available in Spanish.

Parents are encouraged to participate at home and as aides in the classroom, and parent workshops are strongly encouraged. Paraprofessionals and classroom volunteers can easily be trained to use the materials.

## Results

Multiple evaluations of ACCESS's four main components have yielded considerable evidence of effectiveness:

- **Kindersay:** A total of 300 treatment and 97 comparison students, representing 25 classes from 18 different schools in five states, participated in evaluations of Kindersay over a seven-year period. Children who participated in the program consistently achieved statistically significant increases in scores on tests that measure language concept skills (Boehm Test of Basic Concepts, the Peabody Picture Vocabulary Test, and the Cooperative Pre-school Inventory). In contrast, children in comparison groups who did not receive Kindersay instruction evidenced average test score losses or only small gains.
- **Kindermath:** During the 1989-90 and 1991-92 school years, evaluations of Kindermath were conducted in three states, involving 13 treatment and six comparison classes. Children who participated in the program posted standard score gains of almost 10 points on the "How Much and How Many" scale of the CIRCUS Test, gaining 20 percentile ranks. Children in comparison groups posted gains of 7 points and lost a percentile rank.
- **Kinder-Sci:** The science materials were field tested in a rural site, a small city, and an urban area. A total of 288 students in 18 classes from nine schools participated. A pre-test, post-test treatment-comparison group design was used to gauge program effects. Children who received program instruction outperformed students who did not to a statistically significant and educationally meaningful degree on the Woodcock-Johnson Psycho-Educational Battery science test.
- **Kindersee:** Pre-kindergarten students who participated in Kindersee and Kindersay were individually tested on the Cooperative Preschool Inventory that included — in addition to basic information and vocabulary — concepts of size, shape, motion, and visual motor performance. The total group exhibited statistically significant gains averaging an increase of more than 16 NCEs from pre- to post-test. This gain translated into an increase of 10 percentile ranks.

## Implementation Assistance

- **Project Capacity:** The Primak Educational Foundation's national center provides services for initial planning. Training is provided by foundation staff who are experienced users of the program. Capacity building of local trainers is also a goal of the project.

- **Faculty Buy-In:** Faculty buy-in involves: (a) an agreement to carry out the local implementation timeline developed during training; (b) participation in the evaluation of student growth using the program's curriculum-based assessment and standardized tests; and (c) establishment of parent workshop schedules, plans for developing instructional cooperation at home and school, and follow-up participation.
- **Initial Training:** Training is carried out in keeping with district/school needs and the number of program components to be initially implemented. Each component requires at least one full day, followed by three to four follow-up meetings/workshops during the first year. Teacher aides, parents, and program specialists who will assist with the program should participate in the workshops. Administrators should attend at least the overview so they can provide support during the implementation process.
- **Follow-Up Coaching:** Technical assistance is provided in the following areas: (1) additional training in classroom management (where needed); (2) curriculum-based assessment of children; (3) implementation evaluation; (4) parent and paraprofessional training; (5) training practitioners as trainers; (6) impact evaluation by an external evaluator. In addition to site visits, conference calls are provided. An onsite advocate is recommended for project facilitation. This individual is often an administrator or specialist who provides continuity over a period of several years.
- **Networking:** Networking begins at the initial training workshop. Discussion and role-playing activities encourage the exchange of ideas and solutions. Follow-up activities include staff of multiple schools/districts. The project's toll-free number allows for easy communication with those at the national center.
- **Implementation Review:** The project uses the following instruments for implementation review: implementation-concerns questionnaire, implementation timeline, key component checklist, key elements observation forms, and status of project year-end survey.

## Costs

Training in all four curricular areas can be accomplished in three days at a cost of \$1,800 for one trainer plus travel expenses. One-day training workshops for any single component cost \$600 for the trainer plus expenses. A curriculum and materials kit is required for each classroom in each of the curriculum areas at a cost of \$150 to \$200 per kit.

Half-day awareness sessions cost \$300 plus travel; daylong onsite follow-up sessions cost \$600 plus travel.

## Student Populations

ACCESS has been implemented in Title I urban and rural schools nationwide. Many of the schools serve large numbers of disadvantaged students and children with disabilities. The program also has been successfully used with hearing-impaired children in Texas and with autistic children in Mississippi. One implementation of the program, funded for three years by the U.S. Department of Education, involved children who were language delayed. Additionally, a number of schools, including several in the District of Columbia and Washington state, have found the materials useful for teaching English-language learners.

## Special Considerations

It is important that staff receive assistance in classroom management so that small-group instruction can be implemented for part of each day.

## Selected Evaluations

### Developer

None available.

### Outside Researchers

Doino-Ingersoll, J. (1990). *First Level Language: A submission to U.S. Department of Education Program Effectiveness Panel*. Larchmont, NY: Magi Educational Services.

Doino-Ingersoll, J. (1994a). *Evaluation results of Kindersay & Kindersee in Hancock, NY*. Verona, NJ: Strategic Research.

Doino-Ingersoll, J. (1994b). *First Level Science: A submission to U.S. Department of Education Program Effectiveness Panel*. Verona, NJ: Strategic Research.

McKay, T., & Doino-Ingersoll, J. (1989). *First Level Mathematics: A submission to the Department of Education Program Effectiveness Panel*. Larchmont, NY: Magi Educational Services.

## Sample Sites

Please contact the Primak Educational Foundation first (800-444-5729), and staff will arrange for requesters to contact these and other sites:

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./Alaskan	Asian Amer.	Hisp.	White			
Aberdeen Elementary School PO Drawer 607 Aberdeen, MS 39730 Contact: Cheryl Crosby	376	small town	85%	0%	0%	0%	15%	72%	.0%	0%
Hancock Elementary School 16 Reed Street Hancock, NY Contact: Carol Daddazio	197	rural	0%	0%	0%	<1%	99%	40%	0%	10%
Anna Merritt Elementary School Early Childhood Center 389 Green Street Lockport, NY Contact: Ann Jackson	417	urban fringe of large city	16%	0%	1%	3%	80%	48%	4%	50%
Bancroft Elementary School 1755 Newton Street, NW Washington, DC 20010 Contact: Susan Williams	577	large city	20%	0%	13%	65%	2%	M	83%	15%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year. M = Missing data.

## For more information, contact:

Mary A. Felleisen  
Primak Educational Foundation  
PO Box 701  
Devon, PA 19333  
Phone: 800-444-5729  
Fax: 610-644-6789  
E-mail: maf4access@aol.com

## Basic Skill Builders (K-6)

IN BRIEF	
Basic Skill Builders	
<b>Founder</b>	Great Falls Montana Public Schools
<b>Current Service Provider</b>	Sopris West
<b>Year Established</b>	1979
<b># Schools Served (5/1/01)</b>	2,400
<b>Level</b>	K-6
<b>Primary Goal</b>	to build fluency in basic skills
<b>Main Features</b>	<ul style="list-style-type: none"><li>high expectations</li><li>emphasis on speed</li><li>daily exercises and measurements</li><li>teacher directed</li><li>supplements core curriculum</li></ul>
<b>Impact on Instruction</b>	12-15 minutes per day of worksheets and timed skill practice
<b>Impact on Organization/Staffing</b>	none
<b>Impact on Schedule</b>	none
<b>Subject-Area Programs Provided by Developer</b>	no
<b>Parental Involvement</b>	practice sheets are sent home for parents to use with students
<b>Technology</b>	none
<b>Materials</b>	ample materials provided as part of the design

as whole language or the discovery method. The Basic Skill Builders Project provides a set of classroom procedures that includes clear and high expectations, a sequenced curriculum, rapid exercises, and direct and daily measurements of student progress. Together these tools help students build and maintain fluency in such basic skills as reading, math, spelling, handwriting, and grammar.

Five steps guide the Basic Skill Builders process: (1) teachers select the skill and set expectations; (2) students complete Skill Builder Sheets through one-minute timed practices; (3) students score, record, and chart daily progress; (4) teachers review the charts and make instructional/curricular decisions; and (5) teachers, along with students, manage individual as well as group programs.

Basic Skill Builders is not a specific curriculum, but rather an approach that incorporates accuracy and speed to reinforce any method or approach. It is designed to supplement, not supplant, the core curriculum. It can therefore be implemented across content areas to support and reinforce whatever is being taught. Students need 12-15 minutes per day for skill practice.

### Origin/Scope

Basic Skill Builders (formally Precision Teaching Project) was developed in the Great Falls Montana Public Schools in the late 1970s. In the past 20 years it has been used in 2,400 schools in over 40 states.

### General Description

Basic Skills Builders is a K-6 program based on the premise that in order for students to master higher level skills, they must first have a solid foundation in core skills. It is also important that they be able to demonstrate their comprehension of core skills with both accuracy and speed.

Some students, particularly those considered at risk, do not always respond to approaches such

## Results

The Basic Skill Builders approach has showed positive results with special education students and other students traditionally classified as at risk. For example, compared to their non-special education counterparts, special education students who had used Basic Skill Builders showed no significant differences in math, spelling, and reading and remained "remediated" three years following their use of the approach. Another study showed that students who used the Basic Skill Builders approach for four years separated themselves significantly and positively from other fourth graders in the school district in reading, spelling, and mathematics, with the largest difference in mathematics (a 44 percentile difference in favor of the treatment group).

## Implementation Assistance

- **Project Capacity:** The Basic Skill Builders Project is currently housed at and distributed through Sopris West, a publishing/training company in Longmont, Colorado. Along with the project director, six certified trainers are strategically located across the United States. Implementation materials, including training aids and student skill sheets, have been revised and are available for distribution.
- **Faculty Buy-In:** None required.
- **Initial Training:** A one-day training program is provided for teachers and support staff. Training and implementation materials include a student materials kit (30 folders, acetate, charts, pens, and sponges); Basic Skill Builder Sheets with answers (1,500 plus blackline masters in math, reading, grammar, map skills, and more); *Basic Skill Builders Handbook*; and other materials (timers, practice charts, music tapes, etc.).
- **Follow-Up Coaching:** A cadre of certified trainers is available for on-site visitations as well as e-mail and telephone conferences. Building-level coaches are recommended for more intensive training following the initial school-wide training.
- **Networking:** In addition to a Web site and an Internet "chat line," a national conference is held annually.
- **Implementation Review:** Schools are encouraged to monitor and report progress (training and implementation) on an annual basis. Emphasis is placed on curriculum-based measures as well as results from standardized tests.

## Costs

One-time start up costs include a handbook (one per teacher); a student materials kit (one per class); a set of Basic Skill Builder sheets (one set per building); and training costs (one day training fee plus travel). Based upon a building of 25 teachers, the total one-time startup costs would be approximately \$2,100, or \$85 per classroom. There also are continued costs for materials.

## Student Populations

Basic Skill Builders has been adopted in a variety of urban and rural buildings representing various socioeconomic levels, ethnicities, and disabilities.

## Special Considerations

The philosophy underlying this program is based upon promoting basic skills through setting high expectations, breaking the curriculum into fine slices, and practicing. Teachers

accustomed to constructivist approaches (e.g., whole-language) may not be amenable to the Basic Skill Builders approach.

## Selected Evaluations

### Developer

Documents about program effectiveness are available through Sopris West.

### Outside Researchers

U.S. Department of Education. (1979). *National Diffusion Network reports on Great Falls MT, Precision Teaching Project*. Washington, DC: Author.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Frenchtown Elementary 16495 Main Street Frenchtown, MT 59834 406-626-4414 Contact: Peggy Anderson	610	rural	0%	1%	1%	1%	97%	3%	0%	10%
Eatonville Schools Special Services Eatonville, WA 360-879-1800 Contact: Laura Rice	850	small town	1%	2%	1%	5%	91%	0%	0%	11%
Walker Elementary 116 North Quinn Street Savannah, TN 35372 901-928-5750 Contact: Patricia White	350	small town	83%	0%	0%	3%	14%	M	0%	9%
Mattawa Elementary Mattawa, WA 509-932-4433 Contact: Cece Mare	400	rural	10%	0%	0%	72%	15%	M	60%	11%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year. M = Missing data.

## For more information, contact:

Ray Beck  
Basic Skill Builders  
Sopris West  
4093 Specialty Place  
Longmont, CO 80504  
Phone: 800-547-6747  
Fax: 303-776-5934  
E-mail: [raybeck@sopriswest.com](mailto:raybeck@sopriswest.com)  
Web site: <http://www.sopriswest.com>

## COMP: Creating Conditions for Learning (K-12)

IN BRIEF	
COMP: Creating Conditions for Learning	
<b>Founder</b>	Carolyn Evertson and Alene Harris, Vanderbilt University
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1989
<b># Schools Served (5/1/01)</b>	over 5,000
<b>Level</b>	K-12
<b>Primary Goal</b>	improve students' academic achievement and behavior by improving teachers' instructional and behavioral management skills
<b>Main Features</b>	<ul style="list-style-type: none"><li>• applicable to all subject areas</li><li>• addresses both instructional and behavioral management</li><li>• focuses on preventing discipline problems</li><li>• encourages development of management strategies tailored to each classroom</li></ul>
<b>Impact on Instruction</b>	instructional variety typically increases
<b>Impact on Organization/Staffing</b>	none
<b>Impact on Schedule</b>	none
<b>Subject-Area Programs Provided by Developer</b>	no
<b>Parental Involvement</b>	enhanced communication between parents and school
<b>Technology</b>	for trainers, optional PowerPoint CD projection capability
<b>Materials</b>	teacher manual, trainer manual, overheads, and CD are provided by developer

### Origin/Scope

COMP (originally the Classroom Organization and Management Program) grew out of the work of Carolyn Evertson, first at the University of Texas and later at Peabody College of Vanderbilt University. First validated by the National Diffusion Network in 1989 and revalidated in 1996, COMP has served over 13,000 teachers and administrators in 33 states and American territories.

### General Description

COMP is a professional development program for teachers, administrators, and classroom paraprofessionals. The program engages participants in developing research-based, proactive classroom management strategies (behavioral and instructional) that increase instructional time and student academic engagement and prevent discipline problems from occurring. COMP guides teachers in creating

conditions for learning by developing and implementing management systems that fit the unique instructional environment of each teacher's classroom and recognize student differences.

Workshop sessions stress teacher collaboration.

COMP Workshops address six areas:

- Arranging room and materials
- Developing and teaching rules and procedures
- Managing student work to encourage student accountability
- Maintaining good student behavior
- Planning for instruction
- Maintaining lesson momentum

In each of the six areas, COMP leads participants to

- Reflect on their own practices
- Examine related educational research findings
- Translate research findings into guiding principles

- Apply guiding principles to their own classrooms
- Make written commitments for specific change (action plan)
- Share results and continue to problem solve collaboratively

## Results

COMP was developed from a series of 12 correlational and experimental studies (1977-94) involving 362 teachers and classrooms and over 10,000 students. These studies demonstrated that teachers' classroom management practices had positive effects on student behavior and academic achievement. The students in experimental groups demonstrated less inappropriate behavior and higher engagement in academic activities. Teachers improved their monitoring of student work, enacted more efficient transitions between activities, developed and implemented more efficient general procedures, and maintained a more task-oriented focus than their counterparts without training in the program.

Three of these 12 studies, involving 29 experimental classrooms and 33 control group classrooms in grades one through nine, addressed student academic achievement. All three studies showed greater increases on a variety of reading, language arts, and mathematics tests for the students in COMP-trained teachers' classrooms than for those in control classrooms. For example, in one study, mean gains (spring-to-spring) on the Stanford Research Associates Test, the district's Criterion Reference Test, and the State Assessment of Basic Skills for students in grades seven through nine, favored COMP classrooms on 9 of 11 comparisons, 7 of which were statistically significant. Evidence also suggests that COMP has positive effects on achievement for mainstreamed students. In one study, 13 mainstreamed students in COMP classrooms showed greater growth in reading and math than their peers in non-COMP classrooms.

Overall, the studies provide evidence that teachers changed their classroom management practices as a result of participating in the COMP program and that these changes related to improved student behavior and, combined with effective teaching practices, led to improved academic achievement in a variety of classroom settings and subject areas.

## Implementation Assistance

- ***Project Capacity:*** A school contracts with a COMP Certified Workshop Leader (WSL) to conduct inservice with the school (Level One). There are currently 258 WSLs spread throughout 15 states. Once a faculty has completed COMP, a school may elect the next summer to have faculty members trained as WSLs (Level Two), who will then continue to train new faculty members or staff from feeder schools. There are five Certified COMP Trainer of Trainers across the U.S.; COMP provides a yearly training for WSLs at Vanderbilt University.
- ***Faculty Buy-In:*** The faculty of a participating school agrees to (1) allocate at least 24 contact hours for workshop sessions, (2) provide one COMP Teacher Manual per participant, (3) contract with a WSL to conduct the sessions, (4) designate a contact person who will communicate faculty needs to the WSL, (5) make written action plans based on COMP principles, (6) engage in follow-up sessions to reflect on and modify action plans, and (7) report program effects to COMP.
- ***Initial Training:*** The 24 or more hours of training may be configured in one of several ways, according to what works best for a given school. Sample options include

(1) three days in the summer before the school year begins, plus one day 6 to 18 weeks later; (2) two days in the summer before the school year begins, plus two days or four half-days spread across two to four months; (3) one day in the summer before school begins, plus three days spread about a month apart. Initial training includes teachers, administrators, and paraprofessionals; parent liaisons may elect to participate.

- **Follow-Up Coaching:** COMP requires follow-up for each of the six specific areas addressed in a workshop; this is a part of the minimum 24 contact hours cited above. During this time teachers review their action plans, discuss what has and has not worked, continue problem solving for their classrooms, and coach one another, with minimal guidance from the WSL. COMP offers additional follow-up activities if teachers wish to learn classroom observation techniques and engage in peer coaching.
- **Networking:** Teacher sharing and collegiality is a major component of COMP. Workshop sessions are structured to develop and support teachers' professional sharing of ideas. Also, teachers are encouraged to share ideas through the Teachers' Bulletin Board on the COMP Web site.
- **Implementation Review:** Four instruments check program implementation: (1) a consumer satisfaction form participants complete after the initial training days; (2) a written record of ideas teachers have implemented, which is presented during follow-up training; (3) a Teacher Self-Report Inventory in which teachers report perceptions of classroom change after full implementation, and (4) an Administrator Assessment Inventory in which the administrator reports observations of classroom change one year after the initial workshops.

## Costs

For Level One (hiring an outside WSL), costs include one manual per participant (currently \$50) and the WSL's fee (from \$300-\$1,000 per day, depending on experience and degree), travel, lodging, and food. An average cost for a faculty of 30 would range from \$3,500 to \$5,000. If teachers elect to engage in peer observation and peer coaching, additional funding is needed for release time.

For Level Two (training own consultants), costs include trainer materials (manuals, overheads, CD) and either (a) the Trainer of Trainer's fee for onsite training (for 6 to 12 participants) or (b) a registration fee if the school sends faculty members (1 to 3) to Vanderbilt. As of 1998, trainer materials range from \$400 to \$900, depending on media choice. Trainer of Trainer's fees range from \$500 to \$1,000 per day, depending on experience and degree, plus travel, food, and lodging. Vanderbilt's registration fee is \$500; participants cover their own travel, food, and lodging. A Trainer of Trainer's workshop typically lasts four to five days.

## Student Populations

COMP is validated for K-12 classrooms, both regular and special education. COMP has been implemented in Title I schools, urban, suburban, and rural schools, and in schools with large bilingual populations.

## Special Considerations

None.

## Selected Evaluations

### **Developer**

Evertson, C. M. (1985). Training teachers in classroom management: An experimental study in secondary school classrooms. *Journal of Educational Research*, 79(1), 51-58.

Evertson, C. M. (1989). Improving elementary classroom management: A school-based training program for beginning the year. *Journal of Educational Research*, 83(2), 82-90.

Evertson, C. M., & Smithey, M. W. (1993). *Effects of mentor training on protégé's classroom practice: A comparative field study*. Unpublished manuscript.

Evertson, C. M., Weade, R., Green, J. L., & Crawford, J. (1985). *Effective classroom management and instruction: An exploration of models*. Nashville: Vanderbilt University, Peabody College.

### **Outside Researchers**

Davis, P. E. (1995). *Statistical report on Project UPWARD*. Nashville: Vanderbilt University, Peabody College.

Gottfredson, D. C., Gottfredson, G. D., & Hybl, L. G. (1993). Managing adolescent behavior: A multiyear, multischool study. *American Educational Research Journal*, 30(1), 179-215.

## Sample Sites

No sample site data available.

## For more information, contact:

Alene Harris  
COMP: Creating Conditions for Learning  
Box 541 Peabody College  
Vanderbilt University  
Nashville, TN 37203  
Phone: 615-322-8050  
Fax: 615-343-6148  
E-mail: [alene.harris@vanderbilt.edu](mailto:alene.harris@vanderbilt.edu)  
Web site: <http://comp.peabody.vanderbilt.edu>

Accepted for Inclusion March 1999

Description Written May 1999

Costs, Number of Schools, Sample Sites, and Contact Information Updated May 2001

## Feuerstein's Instrumental Enrichment (4-12)

IN BRIEF	
Feuerstein's Instrumental Enrichment	
<b>Founder</b>	Reuven Feuerstein, International Center for the Enhancement of Learning Potential (Israel)
<b>Current Service Provider</b>	Virtual Learning Systems
<b>Year Established</b>	1978
<b># Schools Served (5/1/01)</b>	379
<b>Level</b>	4-12
<b>Primary Goal</b>	to improve students' learning capabilities in all curriculum areas
<b>Main Features</b>	<ul style="list-style-type: none"><li>classroom strategies that bridge academic and non-academic areas</li><li>structured paper-and-pencil exercises that gradually increase in levels of difficulty and abstraction</li><li>mediation of cognitive and affective challenges</li></ul>
<b>Impact on Instruction</b>	teachers focus on assessing students' cognitive development and adapting methods of instruction to foster academic achievement in all content areas
<b>Impact on Organization/Staffing</b>	enhanced collaboration among regular educators, special education teachers, school psychologists, social workers, students, and parents
<b>Impact on Schedule</b>	2-3 hours of FIE instruction per week, preferably in block schedules with academic work
<b>Subject-Area Programs Provided by Developer</b>	no
<b>Parental Involvement</b>	optional (but recommended) parent program
<b>Technology</b>	none required
<b>Materials</b>	detailed student materials and teachers' guides provided

that intelligence is dynamic, not fixed. Feuerstein's theory of Structural Cognitive Modifiability explains deficient learning as the result of a lack of sufficient "mediated learning experiences" prior to school years. He observed that such deficiencies could be corrected at any later time by providing mediated learning experiences by well-trained teachers in combination with specially designed instruments emphasizing cognitive functions.

There are 14 such instruments (e.g., Orientation in Space, Temporal Relations, Categorization), plus accompanying teachers' guides, covering three levels of increasing complexity. The instruments are presented to students over a two- to three-year period. When guided through the exercises in a particular instrument, students learn to apply the principles to any problem or thinking situation where they are appropriate. Thus, although program materials

### Origin/Scope

Feuerstein's Instrumental Enrichment (FIE) was developed by Reuven Feuerstein and colleagues and has been disseminated in the United States since 1978. It has been translated into 18 languages and is currently being used in more than 80 countries worldwide. In the United States thousands of teachers have been prepared to use FIE, serving about 10,000 students.

### General Description

Instrumental Enrichment is a classroom curriculum designed (a) to sharpen critical thinking by providing students with the concepts, skills, strategies, and techniques necessary to function as independent learners; (b) to diagnose and correct deficiencies in fundamental thinking skills; and (c) to help students learn how to learn.

The fundamental assumption of the program, based on psychological research

pioneered by Reuven Feuerstein, is

are free of specific subject matter, they are designed to link to academic school subjects and life skills.

## Results

FIE has been studied extensively by researchers around the world. There are over a thousand related publications, hundreds of which report empirical analyses on the efficacy of FIE in various settings with diverse populations. Additionally, school systems in Connecticut, Michigan, New York, Pennsylvania, and other U.S. states have evaluated their FIE projects.

For example, in Taunton, Massachusetts, implementation of FIE began with a three-year pilot project that compared the reading achievement of FIE and control students. All 107 sixth graders in one school were randomly assigned to experimental groups that received three sessions of FIE per week or control groups that received the regular curriculum. The Stanford Achievement Test for Reading (SAT-R) was administered to the two groups at the beginning of the study and at the end of each of three consecutive academic years. At the end of the first year, scores of the FIE group had improved by 28 percent in reading comprehension and 25 percent in total reading, compared with control group improvements of 8 percent and 10 percent. The gap between the two groups in reading comprehension continued to grow. By the end of the third year, FIE student scores increased by 42 percent, compared to only 2 percent for the control group.

Twenty additional teachers were added each year until all 1,800 students in the 47 fourth, fifth, and sixth grade bilingual, Title I, and gifted-and-talented classrooms in the district were involved in the program. A comparison of the achievement of the fourth grade 1988 cohort (when only 120 of students had been exposed to FIE) with 1990, 1992, and 1994 cohorts (with the number of FIE students increasing each year until 1994, when all fourth graders participated) shows a clear advantage for the later cohorts on the Massachusetts Educational Assessment Program (MEAP). Whereas the earlier data show achievement measures in reading, math, science, and social studies significantly below the state average, the performance of fourth graders in 1992 and 1994 is consistently at or above the state average. Eighth grade cohorts have registered similar (though less pronounced) results.

In general, evaluations of FIE indicate positive results in a variety of academic and non-academic areas. Significant cognitive developmental effects, on the order of 0.7 of a standard deviation or more, are most commonly reported on standard non-verbal measures of intelligence such as Primary Mental Abilities Test, Lodge Thorndike, Cattell, and Ravens. Where FIE has been combined with regular academic curricula or taught by the same teachers, studies have yielded significant gains in academic achievement by experimental groups in reading accuracy and comprehension, mathematical concepts and problem solving, science, and social studies. Also, children exposed to FIE have shown significantly enhanced self-concept, intrinsic motivation, and creativity relative to control or comparison groups.

## Implementation Assistance

- ***Project Capacity:*** Headed internationally by The International Center for the Enhancement of Learning Potential (ICELP) in Jerusalem, FIE has five authorized training centers in the United States, with Virtual Learning Systems as the lead contact. These centers train educators in the theory and instruments used for FIE implementation and provide technical assistance to schools in planning for peer coaching and continuous professional development. Additional training to become a trainer can be completed in

the United States or Israel.

- **Faculty Buy-In:** The highest gains occur where implementation is systemic and applies to all students. Training and joint planning time for the entire staff is essential. Academic growth can also occur where the program is implemented for selected student populations if all educators involved in the student support network maintain close communications.
- **Initial Training:** The preparation of FIE teachers includes 15 days of training and 30 coaching days over a two- to three-year period, covering the theory and student instruments.
- **Follow-Up Coaching:** FIE consultants offer classroom consultation to teachers and the school (or district) leadership. In the process, internal peer coaches are identified and trained to replace external help. Weekly sessions coupled with professional portfolios, action research tasks, and common lesson plans are required.
- **Networking:** In addition to teaming and the facilitation of local leadership, trainers offer in-person consultation. Virtual Learning Systems offers technical assistance through a Web site, a toll-free telephone number, newsletters, video-conferences, an annual national conference, and periodic mailings.
- **Implementation Review:** Virtual Learning Systems encourages schools and districts to evaluate their project from its inception and offers aid in the development of an evaluation plan.

## Costs

Training for a group of 30 teachers for 15 training days and 30 follow-up days costs \$97,275 for consultant time and travel, plus teachers' guides. The cost for student consumable materials is \$30 per level per student, or \$90 per student for all three levels. Costs may be spread over a two- or three-year period depending on the implementation plan.

## Student Populations

The FIE program has been used successfully with regular education students, students with learning disabilities, students with difficulties in specific subjects, culturally different and minority students, blind and deaf students, and gifted students. The availability of FIE materials in various languages (including Spanish) allows for its use with non-English and bilingual speakers. The age of FIE learners ranges from fourth grade to adults. There are four versions of FIE to meet the needs of this wide range of ages and conditions.

## Special Considerations

The FIE intervention requires at least a two-year commitment with three hours of instruction every week. Arrangements must be made to ensure that students complete the program. For transient populations, five hours of intervention each week are recommended.

## Selected Evaluations

### Developer

Feuerstein, R., Miller, R., Hoffman, M. B., Rand, Y., Mintzker, Y., & Jensen, M. R. (1981). Cognitive modifiability in adolescence: Cognitive structure and the effects of intervention. *Journal of Special Education, 15*(2), 269-287.

Rand, Y., Tannanbaum, A. J., & Feuerstein, R. (1979). Effects of Instrumental Enrichment on the psychoeducational development of low-functioning adolescents. *Journal of Educational Psychology, 71*, 751-763.

### Outside Researchers

Haywood, H. C., Burns, S., Arbitman-Smith, R., & Delclos, V. R. (1983). Forward to fundamentals: Learning and the 4th R. *Peabody Journal of Education, 61*(3), 16-35.

Jensen, M. (1989). *Cognitive modifiability and instrumental enrichment: A controlled evaluation of a classroom-based intervention model*. Roswell, GA: National Center for Mediated Learning.

Williams, J. R., & Copp, W. L. (1994). Implementation of Instrumental Enrichment and cognitive modifiability in Taunton Public Schools: A model for systemic implementation in U.S. schools. In Ben-Hur, M. (Ed.), *On Feuerstein's Instrumental Enrichment* (pp. 261-272). Arlington Heights, IL: Skylight.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./Alaskan	Asian Amer.	Hisp.	White			
Horace Greeley School 832 West Sheridan Chicago, IL 60613 773-534-5800 Contact: Haydee Alcarez	600	large city	20%	0%	4%	60%	16%	92%	38%	12%
McKinley Middle School 50 St. Mary's Street Boston, MA 02215 617-635-9853 Contact: Bonnie Miller	70	large city	74%	1%	0%	10%	15%	85%	0%	100%
Glenfair Elementary 15300 East Glisan Street Portland, OR 97230 503-252-3479 Contact: Sandy Garr	480	2	3%	2%	5%	14%	76%	27%	29%	12%
Fresno High School 1839 Echo Avenue Fresno, CA 93704 559-457-2780 Contact: Jean Calabrese	3,400	large city	9%	2%	18%	29%	41%	44%	18%	4%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year. M = Missing data.

### For more information, contact:

Linda Fuller, Director of Business Support  
Virtual Learning Systems  
1430 North Meacham Road  
Schaumburg, IL 60173

Phone: 847-519-1707 or 800-314-1401  
Fax: 847-519-1464  
E-mail: lfuller@virls.com  
Web site: <http://www.virls.com>

# HOSTS: Help One Student To Succeed (K-12)

IN BRIEF	
HOSTS: Help One Student To Succeed	
<b>Founder</b>	Bill Gibbons
<b>Current Service Provider</b>	HOSTS Structured Mentoring
<b>Year Established</b>	1971
<b># Schools Served (5/1/01)</b>	1,127
<b>Level</b>	K-12
<b>Primary Goal</b>	improve the performance of low-achieving students through individualized instruction
<b>Main Features</b>	<ul style="list-style-type: none"><li>structured mentoring programs that involve community volunteers</li><li>personalized learning plans for participating students</li><li>computer database of resources and instructional strategies</li></ul>
<b>Impact on Instruction</b>	no necessary impact on regular classroom instruction; personalized learning plans for tutored students
<b>Impact on Organization/Staffing</b>	master teacher recommended during training period
<b>Impact on Schedule</b>	participating students need at least 30 minutes per day four days per week for tutoring
<b>Subject-Area Programs Provided by Developer</b>	language arts, math, Spanish
<b>Parental Involvement</b>	prepares parents and community members to deliver individualized instruction to students
<b>Technology</b>	teacher access to a computer and modem
<b>Materials</b>	detailed instructional resources and strategies provided

practice using a variety of materials and strategies, and they are reassessed and given additional practice or new objectives as needed. Periodic review assures that newly gained skills are maintained.

Lessons are designed and monitored by each school's HOSTS facilitator or by classroom teachers with the assistance of a large electronic database of resources and instructional strategies. The database also organizes student and mentor data.

HOSTS recently has developed a Whole School Performance Model that combines its structured mentoring programs with two other strategies: InStruct and InSpire. InStruct enables regular classroom teachers to use HOSTS databases to align curricula and materials with local objectives and state standards. Diagnostic information is used to develop learning plans for whole classes as well as individuals. InSpire is a process for recruiting, training, recognizing, and retaining adult, peer, and cross-age mentors. A dozen schools have implemented HOSTS on a schoolwide basis, with six new sites being added in the fall of 1998.

## Origin/Scope

Founded in 1971 by Bill Gibbons, HOSTS (Help One Student To Succeed) has served 1,127 schools in the U.S. and El Salvador. The company has served more than 1,000,000 students over 30 years and involved over 500,000 mentors.

## General Description

HOSTS is a structured mentoring program through which trained community volunteers provide one-on-one instruction for low-achieving students in language arts, math, and/or Spanish.

Participating students meet with a mentor 30 minutes per day at least four days per week. For each session, the mentor is provided with an individualized lesson plan that addresses the student's instructional and developmental level, learning style, and learning objectives. Students

## Results

Two large scale studies, one completed in 1982 and the other in 1998, report substantial gains for students participating in the HOSTS language arts program. In the earlier study, 3,742 HOSTS students in grades one through nine from over 100 schools around the nation took either the Comprehensive Test of Basic Skills (CTBS) or the California Achievement Test (CAT) in the fall and again in the spring. Results, reported as Normal Curve Equivalent scores (NCEs), showed that HOSTS students on average gained anywhere from 7 NCE points (grade six) to 16 NCE points (grade two). A gain of 7 NCE points is equivalent to approximately two grade levels of progress.

The 1998 study involved over 6,600 students at 136 schools in Delaware, Michigan, and Texas, with the largest concentration of students in grades two through four. The study reported average reading gains of 2.0 grade levels for the 1995-96 school year — double the expected gain — as measured by pre- and post-test scores on the Informal Reading Inventory. A follow-up study for the 1996-97 school year yielded similar results.

Neither of these studies involved control or comparison groups. However, data from Washington state, which is reported in the 1982 study, indicate that HOSTS students in that state achieved higher NCE gains than students participating in eight other reading programs. A more formal comparison study of the HOSTS language arts program in the Portland, Oregon, school district showed that, in each academic year of a four-year period (1981-82 through 1984-85), students in grades two through eight participating in HOSTS averaged larger gains on the CTBS and the Portland Achievement Test than Chapter 1 students not involved with HOSTS. The differences were not statistically significant, however.

Performance data for the current math program is limited because of revisions in the program. Anecdotal data reported in a profile of exemplary HOSTS programs indicate that students in nine schools in Texas and Oklahoma demonstrated substantial gains in scores on the HOSTS Math Placement Inventory or the Texas Assessment of Academic Skills.

## Implementation Assistance

- **Project Capacity:** HOSTS has a staff of 25 full-time trainers. In addition, consultant teacher/users are available to train and support new sites. With existing staff and field locations, programs can be implemented in several hundred sites in 1998-99.
- **Faculty Buy-In:** A HOSTS implementation does not require faculty buy-in, but teachers and administrators must have a strong desire to improve student achievement using one-on-one instruction.
- **Initial Training:** HOSTS provides three days of intensive training for a teacher coordinator and/or all classroom teachers participating in the program. There are a variety of implementation formats to choose from based on cost considerations and a school's approach to professional development. Formats available include training for trainers, lead teachers, and mentor recruiters.
- **Follow-Up Coaching:** Two onsite implementation and technical assistance visits are scheduled during the school year. Unlimited Help Line for technical assistance is included. A series of newsletters and memos remind HOSTS teachers and administrators of key implementation tasks.

- **Networking:** An annual three-day international conference and regional workshops provide continuous staff development and networking opportunities for teachers and administrators.
- **Implementation Review:** The HOSTS Success Indicators checklist allows staff to measure implementation progress against seven key characteristics of effective programs. The checklist may be used as a self-check or as part of an outside evaluation.

## Costs

HOSTS Structured Mentoring pricing is based on a fee for each instructional program. The price per program (Language Arts, Math, or Spanish) is \$34,900 for year one, \$15,900 for year two, and \$6,600 for year three and all subsequent years. HOSTS Language Arts Schoolwide, which includes a structured mentoring program license, is priced at \$64,900 for year one, \$28,800 for year two, and \$10,900 for year three and all subsequent years. These fees cover standardized training, instructional materials, and software licensing. The implementation model and training can be customized, requiring modification in pricing.

Other expenses that schools may confront vary considerably from school to school and may include the purchase of supplementary materials, compensation for the HOSTS coordinator, substitutes for training days or funding for training when school is out of session, and teacher access to a computer and printer.

## Student Populations

HOSTS works with all students in grades K-12 with a wide range of populations. Title I students have comprised a significant proportion of the students served over the past 27 years. The model is being used across the country in large, medium, and small districts from urban to rural schools. The HOSTS Spanish language arts program is specifically designed for K-3 Spanish-speaking students. The program is dual-language, transitioning students into English in six to eight months.

## Special Considerations

Teachers must be willing to use trained mentors (community, peer, and cross-age) to provide one-to-one instructional opportunities for students. Teachers will need to have access to a computer.

## Selected Evaluations

### Developer

*Champions for children: 1996-97 school profiles of HOSTS exemplary programs.* Dallas: HOSTS Corporation.

### Outside Researchers

Bryant, H. D., Edwards, J. P., & LeFiles, D. C. (1995). The HOSTS program: Early intervention and one-to-one mentoring help students succeed. *ERS Spectrum, 13*(4), 3-6.  
 Holden, O. D., Simmons, C. W., Holden, J. (1998). *Structured Mentoring: Its impact on reading for students.* Austin, TX: Educational Performance Management.  
 Schlotfeldt, J. D. (1982). *HOSTS impact study: 1979-1982.* Unpublished manuscript.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Horace Mann Enrichment Center (PreK-5) 1105 NW 45th Oklahoma City, OK 73118 405-524-4885 Contact: Maxine McNeil	220	large city	48%	8%	0%	6%	38%	86%	10%	20%
Meadows Elementary School (PreK-5) 1600 Rigsbee Plano, TX 75074 972-519-8810 Contact: Naomi Beaty	579	urban fringe of large city	1%	0%	2%	49%	48%	76%	47%	10%
Central Middle School (6-8) 305 East Reardon Midland, MI 48640 517-923-5571 Contact: Gary Verlinde	642	mid-size city	3%	1%	1%	2%	93%	20%	5%	30%
Westside Middle School (7-8) 8601 Arbor Street Omaha, NE 68124-2149 402-390-6464 Contact: Susan Evanich	798	large city	3%	1%	2%	2%	92%	15%	1%	11%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

### For more information, contact:

Chad Woolery  
HOSTS Structured Mentoring  
1349 Empire Central Drive, Suite 520  
Dallas, TX 75247  
Phone: 214-905-1308  
Fax: 214-905-1176  
E-mail: [cwoolery@hostscorp.com](mailto:cwoolery@hostscorp.com)  
Web site: <http://www.hosts.com>

# HOTS: Higher Order Thinking Skills

## (4-8)

IN BRIEF	
<b>HOTS: Higher Order Thinking Skills</b>	
<b>Founder</b>	Stanley Pogrow, University of Arizona
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1981
<b># Schools Served (5/1/01)</b>	3,100
<b>Level</b>	4-8 (can start in the middle of grade 3)
<b>Primary Goal</b>	to develop thinking and problem-solving skills in ways that transfer to gains in basic skills, academic performance, and social confidence
<b>Main Features</b>	<ul style="list-style-type: none"> <li>• systematically designed higher-order thinking and problem-solving activities</li> <li>• use of computers in combination with Socratic dialogue</li> </ul>
<b>Impact on Instruction</b>	HOTS eliminates lecture, drill, and worksheets and substitutes dialogue, coaching, and reflective Socratic discussion
<b>Impact on Organization/Staffing</b>	requires specially trained teacher(s)
<b>Impact on Schedule</b>	can be done during the school day (35-45 minutes per day 4-5 days per week) or after school (140 minutes per week, 2-4 afternoons per week) for 1-2 years
<b>Subject-Area Programs Provided by Developer</b>	no
<b>Parental Involvement</b>	parents are encouraged to visit evening demonstrations with their children; joint parent-student activities are discussed in a parent handbook
<b>Technology</b>	cluster of 7-12 Macintosh or Windows PCs
<b>Materials</b>	software, trade books, curriculum

### Origin/Scope

Higher Order Thinking Skills (HOTS) was founded in 1981 by Stanley Pogrow, Associate Professor of Education at the University of Arizona. As of May 2001, 3,100 schools had implemented HOTS.

### General Description

The HOTS program uses computer activities, specially designed curricular materials, and Socratic teaching strategies to enhance the thinking and problem-solving skills of Title I and learning disabled students in fourth through eighth grades. Participants in HOTS classes spend either 35-45 minutes a day, four to five days a week, or two to four afternoons a week after school, for one to two years in the HOTS program. Generally HOTS instruction takes place during the time that is traditionally devoted to Title I instruction and is delivered by teachers specially trained in the HOTS method. Teachers attend a week-long workshop that helps them to shift from traditional teaching approaches of lecturing, refereeing, and linear sequencing to

more open-ended, Socratic coaching techniques. All traditional drill and practice activities are replaced in HOTS classes with systematically designed higher order thinking activities. No workbooks or worksheets are used. Instead, Socratic dialogues are conducted around specially designed HOTS computer activities. Computers are used because of their ability to enhance motivation and to respond immediately to students' ideas.

The first half of HOTS classes are teacher-led discussions during which teachers probe student responses in accordance with Socratic techniques. The discussions, specified in a detailed curriculum, are designed to develop the thinking skills of: (a) metacognition, (b) inference from

context, (c) decontextualization, and (d) information synthesis. These thinking skills are considered essential for success in the more complex and integrative curriculum in place after third grade.

After the discussion time, students are given a computer-based challenge to work out. The challenge involves developing a strategic method to achieve a goal using information about several factors. For example, students may be asked to land a hot-air balloon at a precise point taking into account information about altitude, wind direction, speed, terrain, and other flying objects, and how a hot-air balloon operates. Using the information on the computer screen in conjunction with strategic problem solving simultaneously develops reading comprehension and metacognition skills. Teachers monitor students' computer work. They work to stimulate student thinking by encouraging them to articulate their ideas and to explain why and how the computer reacts to their strategies. Continually pressing students to explore their strategies and results is intended to increase the sophistication of their language use — both in terms of comprehension and articulation. This expanded language use and comprehension enhances students' ability to learn all content at more sophisticated levels the first time it is taught.

## Results

Over the past six years, HOTS has been thoroughly evaluated at several sites for its effect on student reading comprehension, grade point average, problem solving methods, metacognitive abilities, and writing abilities, as well as other achievement indicators. Though each study was unique in the design and instruments used, all indicated that students receiving HOTS instruction were performing better than or equal to control groups. For example, two separate studies, one based on Iowa Test of Basic Skills student scores, and one based on California Achievement Test student scores, found that HOTS students consistently made significantly greater progress in math and reading achievement than control groups did. (In one instance, fifth grade math students in both groups made substantial gains.) Another study that compared HOTS instruction to traditional Title I instruction for fourth and fifth grade students found that the HOTS program was effective in raising student self-concept, sequential synthesis, and higher order thinking skills for fifth grade students. It also found that both HOTS and Title I instruction raised student achievement scores.

## Implementation Assistance

- **Project Capacity:** HOTS currently has the capacity to organize up to 80 trainings/year (multiple sites attend each training) around the country with its 21 national trainers. This enables the program to establish 500 new sites/year.
- **Faculty Buy-In:** Total faculty buy-in is encouraged but not required. HOTS will provide training to any site (school, district, or area) with at least six registered participants.
- **Initial Training:** HOTS trainers provide sites with a five-day small group training for teachers and paraprofessionals. Principals and coordinators attend the training on one of those days.
- **Follow-Up Coaching:** Brush-up training and site visitations are optional with the HOTS program.
- **Networking:** HOTS supports an 800 phone line, e-mail technical support capabilities, and an informational Web site and provides low-cost updates on curriculum and software when appropriate.

- **Implementation Review:** HOTS surveys all sites every three years, and consulting services are available.

## Costs

The one-time charge for implementing HOTS for the typical school, which includes all software, curriculum, five-day small group teacher training (including the trainer's expenses), trade books, ongoing support, and newsletter, is \$6,600. There is a 10% discount for districts implementing the program in four or more schools in a given year. The optional schoolwide Socratic training workshop is \$2,000 including expenses.

## Student Populations

HOTS targets Title I and learning disabled students in grades four through eight.

## Special Considerations

The HOTS program can be started in the middle of third grade for states that test in fourth grade.

HOTS offers (a) an optional schoolwide workshop in Socratic teaching techniques for all teachers grades K-8, and (b) Supermath math problem-solving supplements for grades 4-10. The developers also design customized CSRD schoolwide problem-solving-across-content interventions.

## Selected Evaluations

### Developer

None available.

### Outside Researchers

Bushon, S. (1992). *Kenai Peninsula Borough School District*. Soldotna, AK. Unpublished study.  
 Corliss, W. (1993). *Detroit Public Schools*. Detroit, MI. Unpublished study.  
 Darmer, M. (1995). *Elvira Elementary School* (Sunnyside Unified School District). Tucson, AZ. Unpublished study.  
 Laboy, M. (1994). *Landis Intermediate School*. Vineland Board of Education, Vineland, NJ. Unpublished study.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
Foster Elementary 505 East Foster Ludington, MI 49431 231-845-7303 Contact: Jerry Erikson	300	small town	<1%	1%	0%	7%	91%	43%	1%	14%
Hawthorne Elementary 8301 Rawles Avenue Indianapolis, IN 46219 317-532-3950 Contact: Phil Talbert	475	large city	38%	0%	0%	1%	61%	60%	1%	1%

Fallston Elementary PO Box 39, Gary Street Fallston, NC 28042 704-538-7341 Contact: Mary P. Frye	617	rural	16%	0%	0%	3%	81%	36%	3%	13%
Talbot Middle School 124 Melrose Street Fall River, MA 02723 (508)675-8350 Contact: Bruce Clark	789	small town	6%	<1%	11%	6%	77%	52%	4%	<1%
Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.										

### For more information, contact:

Laurie Dagostino  
HOTS Dissemination  
PO Box 42620  
Tucson, AZ 85733  
Phone: 520-795-2143 or 800-999-0153  
Fax: 520-795-8837  
E-mail: [info@hots.org](mailto:info@hots.org)  
Web site: <http://www.hots.org>

## Lightspan Achieve Now (K-6)

IN BRIEF	
Lightspan Achieve Now	
<b>Founder</b>	Lightspan Partnership
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1993
<b># Schools Served (5/1/01)</b>	2,841
<b>Level</b>	K-6
<b>Primary Goal</b>	to increase time-on-task, promote family involvement in homework, and facilitate mastery learning and teaching
<b>Main Features</b>	<ul style="list-style-type: none"><li>• standards-based learning games that support retention and encourage practice for mastery</li><li>• family participation in academic lives of children</li><li>• PlayStation® game console loaned to families to attach to television</li><li>• ongoing professional development for teachers and staff, and workshops for families</li></ul>
<b>Impact on Instruction</b>	standards-based teaching and learning in class and at home; increased time-on-task; frequent monitoring of student progress
<b>Impact on Organization/Staffing</b>	must assign a Lightspan coordinator for each site; family involvement liaison (staff or volunteer) desirable
<b>Impact on Schedule</b>	time required for planning and professional development
<b>Subject-Area Programs Provided by Developer</b>	yes (reading, language arts, mathematics)
<b>Parental Involvement</b>	program supports learning at home and two-way communication between school and home
<b>Technology</b>	CDs, multi-media computers, digital multiplayers, Internet
<b>Materials</b>	35 CDs for K-2, 36 CDs for 3-4, and 34 CDs for 5-6; teacher guides for each CD; progress charts; content correlations; assessment program

### Origin/Scope

The Lightspan Partnership Inc. was founded in 1993. Lightspan Achieve Now was implemented in 16 schools in 1995-96. As of May 2001, 2,841 schools, serving students from a wide range of economic backgrounds, had used the model in classrooms and homes.

### General Description

Schools and classrooms committed to an aligned instructional program in reading, language arts, and mathematics use Lightspan Achieve Now to increase each student's engaged time-on-task, promote family involvement in homework, and create a learning environment designed around mastery learning and teaching.

The foundation of Lightspan is family involvement and increased learning through after school use of instructional video games, aligned with the school's curriculum, that teach critical targeted skills and strategies. Lightspan is centered around discipline-grounded, standards-based, curriculum-driven, interactive technologies. In addition, Internet activities facilitate

communications, enhance family involvement, and make learning fun.

When a school signs on to use Lightspan, an overall plan aligns achievement goals; teachers, families, and staff are trained; and an Education Partnership Consultant from the national staff is assigned to help align the curriculum to the Lightspan program. When the correlation is completed, teachers start to use Lightspan in the classroom and as a homework replacement tool. Students are assessed and grouped accordingly, and then regrouped, if needed. The classroom teacher introduces a Lightspan game in the classroom. The teacher might then send the game home for students to complete over the next few weeks with their families. Families are trained so they understand their role and make the necessary commitment to support their child in completing homework.

## Results

To date, no large-scale, systematic evaluations comparing student achievement in Lightspan schools with that in control schools have been published. However, Lightspan has contracted with nationally known researchers to conduct a rigorous three-year analysis of 22 Lightspan schools, focusing on student achievement and other variables. The study will employ an experimental design and incorporate multiple measures.

Preliminary results from these and other smaller-scale evaluations and case studies have yielded evidence of improved academic achievement in vocabulary development, reading comprehension, mathematics problem solving, and academic growth during summer programs. At Lansdowne Elementary School in Baltimore County, Maryland, 34 percent of students in grades K-2 moved from below grade level performance to performance at or above grade level versus movement of just 13 percent of students in a matched school, as measured by various standardized tests. In Mesa Public Schools (Arizona) during the 1997-98 school year, grade one and grade three students learning English as a second language showed significant gains over a control group. Students in three Title I schools in Wichita, Kansas, were compared to peers from three matched Title I schools within the district. Results from the Metropolitan Achievement Test, 7th Edition, showed reliable gains for the Lightspan group at all grades tested.

RMC Research surveyed over 2,000 families and 269 teachers over two years to measure Lightspan's impact on learning time, family involvement in homework, and student engagement and motivation. Eighty-eight percent of families reported that students spent 30 minutes or more per day on Lightspan homework. Seventy-two percent reported that time on Lightspan replaced time typically spent on non-educational television and video games. Sixty-six percent reported spending 30 minutes or more per day with their children using Lightspan. Sixty percent reported that total time spent with their children on schoolwork increased with Lightspan. Over 90 percent of teachers reported finding Lightspan useful for providing practice and reinforcement, encouraging cooperative learning, and meeting the needs of individual students.

## Implementation Assistance

- **Project Capacity:** Headquartered in San Diego, California, Lightspan has over 40 Education Partnership Consultants throughout the country. This field staff is augmented by a headquarters team of three, a fully staffed Product Support desk, and a staff of curriculum experts who produce teachers' guides and national and state correlations.
- **Faculty Buy-In:** No formal vote is required for schools to start using Lightspan. Schoolwide buy-in is achieved as a collaborative process involving the principal as instructional leader, an assigned site coordinator (usually the assistant principal), the family involvement coordinator, and grade-level curriculum liaisons.
- **Initial Training:** Training begins with identifying school needs and reviewing the school action plan. It includes site coordinator training, curriculum training for grade level liaisons and classroom teachers including product exploration, an introduction to family involvement, and implementation strategies discussion. Additionally, families are trained before the program is sent home.
- **Follow-Up Coaching:** During the first year of implementation, the Education Partnership Consultant will model integration techniques, assist schools in setting up the home use portion of the program, and develop a plan for follow-on Family Involvement Workshops. Finally, the consultant, in collaboration with school staff, conducts regular

program review activities to ensure successful implementation.

- **Networking:** This is facilitated through regular professional development events held year-round, throughout the country. Additional networking opportunities are provided through the FLASH newsletter and The Lightspan Network Web site.
- **Implementation Review:** Continual self-evaluation is built into the implementation process. All schools participate in the Self-Evaluation Process using tools developed for this purpose by RMC Corporation. Most schools also participate in School-Based Action Research using the Action Research Toolkit developed for this purpose by Interactive, Inc.

## Costs

Lightspan is packaged in grade clusters: K-2, 3-4, and 5-6. Schools must buy an Achieve Now school package, teacher licenses, and student licenses for each grade cluster. A minimum of nine professional development visits is needed in order to ensure a successful Lightspan implementation.

A \$2,000 school package must be purchased in a school's initial order and can only be purchased once per site. This package includes one set of site materials, one Lightspan Desktop Professional Development CD for coordinator training, three on-site professional development visits, and access to the Partner Line for 12 months (\$500 per year succeeding the initial 12 months). A \$2,650 teacher license must be purchased for each teacher using the program. The license includes one grade cluster curriculum license, one set of curriculum support and assessment materials, one Lightspan Desktop Professional Development Series, and one on-site professional development visit. Finally, a \$600 student license must be purchased for each student who will use the program at home. If the program is used in an after-school, summer-school, or computer-lab setting, a student license is required for each school computer or PlayStation rather than for each student.

Optional on-line resources are available, including eduTest@School (\$2,500 per year subscription), eduTest@SchoolPlus (\$4,650 per year subscription), and The Lightspan Network (\$3,000 per year subscription).

## Student Populations

Lightspan Achieve Now is designed to increase learning opportunities and enhance achievement for all students. It has been successfully implemented in schools with high numbers of at-risk students, including Title I and ESL students. The content is full-motion video, completely audio supported, with contextual help. Written materials for families are also available in Spanish.

## Special Considerations

Lightspan Achieve Now is a flexible instructional tool. Changes in teachers' classroom practice are incremental and based on needs identified in the school improvement plan. Lightspan is designed to be woven into classroom practice and assigned homework.

## Selected Evaluations

### Developer

Baltimore County School District. (1997). [Lansdowne Elementary School]. Unpublished raw data.  
 Caldwell County School District. (1997). [Gamewell Middle School]. Unpublished raw data.  
 Duncanville Independent School District. (1997). [Central Elementary School]. Unpublished raw data.  
 Laurens County School District #56. (1997). [Clinton Elementary School]. Unpublished raw data.

### Outside Researchers

Blanchard, J. (1998). *Eisenhower Elementary School, Mesa Unified School District, Mesa, Arizona*. Unpublished manuscript, Arizona State University, Tempe.  
 Godin, K. (1996-97). *Lightspan evaluation research*. (Available from RMC Research Corporation, Portsmouth, NH).  
 Shakeshaft, C. (1998). *The Lightspan Partnership, Inc. and the home-school connection in Adams County School District 50, Westminster, Colorado*. Unpublished manuscript, Hofstra University, Department of Administration, Policy & Literacy, Hempstead, NY.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./Alaskan	Asian Amer.	Hisp.	White			
Anderson Elementary School 2945 Victoria Street Wichita KS 67216 316-973-1900 Contact: Linda Imbler	539	large city	25%	3%	13%	15%	44%	74%	22%	13%
Turner-Howson Elementary 11183 West Second Street Box 246 Rudyard, MI 49780 906-478-3007 Contact: Gary Davis	266	large city	0%	26%	0%	2%	72%	53%	0%	9%
Whiteville Elementary School Highway 100 Whiteville, TN 38075 901-254-8013 Contact: Yvonne Allen	435	rural	82%	0%	0%	0%	18%	90%	0%	18%
East Salisbury Elementary School 1201 Old Ocean City Road Salisbury, MD 21804 410-749-3488 Contact: Leslie Hughes	518	small town	66%	0%	3%	5%	26%	65%	2%	17%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

## For more information, contact:

Bernice Stafford  
 Lightspan Achieve Now  
 10140 Campus Point Drive  
 San Diego, CA 92121  
 Phone: 888-425-5543, ext. 8563  
 Fax: 858-824-8001  
 E-mail: bstafford@lightspan.com  
 Web site: <http://www.lightspan.com>

## Positive Action (K-12)

IN BRIEF Positive Action	
<b>Founder</b>	Carol Gerber Allred
<b>Current Service Provider</b>	Positive Action Company
<b>Year Established</b>	1977
<b># Schools Served (5/1/01)</b>	over 7,500
<b>Level</b>	K-12
<b>Primary Goal</b>	to increase students' academic achievement and develop their potential
<b>Main Features</b>	<ul style="list-style-type: none"> <li>• a universal philosophy</li> <li>• six program units that apply the philosophy in the intellectual, physical, and social/emotional areas</li> <li>• school-climate, counselors, and parent/community programs</li> </ul>
<b>Impact on Instruction</b>	teachers use Positive Action method of instruction
<b>Impact on Organization/ Staffing</b>	committee representing administrators, faculty, staff, students, parents, and community members is planning and decision-making body; training coordinator recommended
<b>Impact on Schedule</b>	15-minute lessons 4-5 days/week (K-6), 2-3 days/week (7-8); $\frac{1}{2}$ -hour lessons 1 day/week (9-12); schoolwide climate activities
<b>Subject-Area Programs Provided by Developer</b>	no (program does list competencies in multiple subjects for grades K-6)
<b>Parental Involvement</b>	family lessons and materials; parenting classes; parents serve on decision-making committee
<b>Technology</b>	schools provide CD players and VCRs
<b>Materials</b>	teacher's kits for each grade K-8; drug-education kits for grades 5-8; text for grades 9-12; principal's, counselor's, and parents' kits

### Origin/Scope

Carol Gerber Allred developed and taught Positive Action as a high-school social studies elective in Twin Falls, Idaho, from 1974 through 1977. From 1977 through 1982 she developed the program for elementary students. She founded Positive Action Company in 1982. The program has been used in over 7,500 schools in every U.S. state and several foreign countries. It is currently in about 2,500 schools.

### General Description

**Philosophy:** The Positive Action program is based on the belief that "you feel good about yourself when you do positive actions." In schools, families, and communities, positive actions are taught in the physical, intellectual, and social/emotional areas. They are practiced and reinforced all day, every day.

**Mission and Goals:** The mission of Positive Action is to teach individuals, families, schools, and communities principles that lead to success and happiness. Major

Positive Action goals are: (1) to improve individuals, families, schools, and communities; (2) to increase positive behaviors among students, such as academic achievement, attendance, self-control, problem-solving skills, conflict resolution, and community service; and (3) to decrease negative behaviors like drug, alcohol, and tobacco use; actions leading to discipline referrals, suspensions, or expulsions; and delinquency and gang membership.

**Processes:** School administrators, with assistance from Positive Action Company, guide the adoption, implementation, and evaluation of the program. Upon adoption, the School Positive Action Coordinator (principal or designee) organizes the Positive Action Committee (of school, home, and community members). Together, they monitor and promote school activities and link the school, home, and community programs.

Central to the program are six Program Units used in student, school, parent, and community programs: (1) self-concept; (2) positive actions for your mind and body; and four units that teach social/emotional positive actions for (3) managing yourself responsibly; (4) getting along with others; (5) being honest with yourself and others; and (6) improving yourself continuously.

The school integrates the program units in a scoped-and-sequenced classroom curriculum and a school-climate program. *Teacher's Kits* contain a lesson manual and materials for each grade K-8 and a text for grades 9-12. The school-climate program (elementary and secondary *Principal's Kits* and a *Counselor's Kit*) encourages and reinforces the practice of positive actions schoolwide and extends the program to families and the community. The parent program includes a curriculum in a *Family Kit* and links the family to the school activities. The community program includes a *Community Kit* and combines with the school and parent programs to align all the environments (schools, families, and community) involved in the program.

## Results

The premise of Positive Action is that academic achievement will improve as students' self-concept and behavior improve. Data from a number of different types of schools (rural, urban, and suburban; high and low poverty; small and large minority populations) have demonstrated improved student achievement following the implementation of the program. For example:

- An early study (1979) compared second and fourth grade Iowa Test of Basic Skills (ITBS) reading and math scores in a pilot Positive Action school to those in a control school. The researcher found that the mean improvement in reading scores in both grades was significantly greater for the Positive Action school than for the control. (However, students in the control school showed greater improvement in math.)
- At DiChiaro Early Childhood School (K-3) in Yonkers, New York, a downward trend in reading and math scores was reversed over a five-year period after the implementation of Positive Action. In 1992, the year prior to implementation, 56 percent of third-grade students scored above the state reference point in reading, 42 percent in math. Five years later, 89 percent of third-grade students scored above the state reference point in reading, 96 percent in math.
- The year after Positive Action was implemented at Sims Elementary School in Austin, Texas, the percentage of students in grades three through five who passed the Texas Assessment of Academic Skills (TAAS) increased from 25 percent to 67 percent in math, from 44 percent to 58 percent in reading, and from 62 percent to 85 percent in writing. Similar increases in test scores one year after implementation have been documented in several other elementary schools.

At the above-mentioned schools and numerous others, data also demonstrate improvements in self-concept and life-adjustment skills, increases in student attendance and parent involvement, and decreases in discipline referrals.

It is worth noting that all student achievement data for Positive Action and virtually all the attitude and behavior data come from elementary schools.

## Implementation Assistance

- **Project Capacity:** The company's capabilities include: (a) a training staff from company and regional headquarters; (b) program users who are master trainers; (c) a research-and-development department that continually revises and creates materials; (d) consultants in research and evaluation; and (e) a publications department.
- **Faculty Buy-In:** The Positive Action adoption workshop introduces faculty and staff to the program, assesses school needs, achieves faculty buy-in, and identifies and trains the Positive Action Coordinator and Committee.
- **Initial Training:** A half-day orientation workshop, conducted either by a Positive Action trainer or the local coordinator, introduces the program. Another workshop introduces the Positive Action philosophy, method of instruction, and program units.
- **Follow-Up Coaching:** Seven workshops spanning the first year of implementation cover individual components of the program in more detail. Before the first workshop, the faculty is divided into five teams. Each team is responsible for the implementation of one component. The teams prepare the workshops, oversee implementation, and serve as coaches for their respective components.
- **Networking:** The company encourages networking among schools by: (a) publishing a newsletter and a free Idea Exchange booklet; (b) disseminating a list of schools with successful programs and facilitating visitations; (c) hosting a national conference; (d) maintaining a Web site; (e) providing an e-mail address and toll-free telephone number; (f) presenting at major national educational conferences; (g) linking to researchers and evaluators; and (h) maintaining a customer-service department.
- **Implementation Review:** The company provides schools with plans to evaluate the effectiveness and fidelity of the program's implementation. The school can conduct a self-review or contract with outside reviewers (including Positive Action Company).

## Costs

**Materials Costs:** School materials for the teachers, principal, and counselor of an average elementary school cost approximately \$31.25 per student; for middle schools, \$14.60 per student; and for high schools, \$15.85 per student. Parent materials are \$55 per family (one time per-family cost).

**Training Costs:** A Positive Action trainer costs \$600 per day plus travel and accommodation expenses; the school provides the facility. Training workshop materials are \$360 each; materials addressing implementation and continuation are \$160 each.

**Evaluation Costs:** Costs for evaluation can vary greatly, from near nothing by utilizing existing school staff to as much as \$4 per student for independent evaluations, depending on the level of the evaluation plan.

**Additional Costs:** The principal or principal's designee (5-10 percent time) is usually the Positive Action Coordinator.

## Student Populations

Positive Action has been implemented in urban, suburban, and rural schools as well as in schools of all socioeconomic levels, Title I schools, schools with English-language learners and special-needs students, schools on Indian reservations, multicultural communities, and multiple countries.

## Special Considerations

The program requires a Positive Action Coordinator, usually the principal or principal's designee; the allocation of teachers' time for teaching and coordinating; the reinforcement of positive actions throughout the day by all school personnel; and the use of trained persons to teach parenting classes.

## Selected Evaluations

### Developer

Allred, C. G. (1984). *The development and evaluation of Positive Action: A systematic elementary school self-concept enhancement curriculum, 1977-1983*. Unpublished doctoral dissertation, Brigham Young University, Provo, UT.

Allred, C. G. (1984). *The Positive Action program: An evaluation*. Honolulu: Honolulu School District, Royal School.

Allred, C. G. (1984). *The Positive Action program: An evaluation*. Hermiston, OR: Hermiston School District.

### Outside Researchers

Stephenson, D. (1979). *Evaluation of the Twin Falls primary Positive Action program 1978-79*. Twin Falls, ID: College of Southern Idaho.

Woodward, J. R. (1996). *Improving academic achievement of fourth-grade students through a program of self-concept enhancement activities*. Unpublished doctoral practicum report, Nova Southeastern University, Jacksonville, FL.

Duvall, E. J. (1986). *Improving students' self-control through enhanced classroom management practices at Buckhorn Elementary School*. Unpublished doctoral dissertation, Nova University, Fort Lauderdale, FL.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./Alaskan	Asian Amer.	Hisp.	White			
Valley View Elementary 17200 Valley View Avenue Cleveland, OH 44136 216-251-5873 Contact: Angela Zaceardelli	200	large city	35%	0%	0%	0%	65%	100%	1%	8%
Quarryville Elementary 211 South Hess Street Quarryville, PA 17566 717-786-2546 Contact: Kathleen Hood	484	rural	1%	1%	1%	1%	96%	1%	1%	3%
Noonan Elementary 701 West 3rd Street Alice, TX 78332 361-664-7591 Contact: John Jackson	400	small town	1%	0%	0%	88%	11%	85%	40%	11%
DiChiaro Elementary 373 Bronxville Road Yonkers, NY 10702 914-255-7470 Contact: Patricia Langan	331	urban fringe of large city	26%	0%	0%	37%	37%	46%	8%	11%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year.

## For more information, contact:

Carol Gerber Allred  
Positive Action Company  
264 Fourth Avenue South  
Twin Falls, ID 83301

Phone: 208-733-1328 or 800-345-2974  
Fax: 208-733-1590  
E-mail: callred@positiveaction.net  
Web site: <http://www.positiveaction.net/>

# The Responsive Classroom® (K-8)

IN BRIEF	
The Responsive Classroom	
<b>Founder</b>	Northeast Foundation for Children
<b>Current Service Provider</b>	same as founder
<b>Year Established</b>	1981
<b># Schools Served (5/1/01)</b>	schoolwide implementation in 50 schools; partial implementation in 200 additional schools
<b>Level</b>	K-8
<b>Primary Goal</b>	improving instructional delivery by improving classroom organization, social climate, and collaboration among adults
<b>Main Features</b>	<ul style="list-style-type: none"><li>• morning meeting</li><li>• guided discovery</li><li>• rules and logical consequences</li><li>• classroom organization</li><li>• choice for students</li><li>• reporting to parents</li></ul>
<b>Impact on Instruction</b>	influences teachers' approach to instruction
<b>Impact on Organization/Staffing</b>	release time from classroom required; some school systems create district position for oversight and staff development
<b>Impact on Schedule</b>	for primary grades: first period changes for morning meetings; for middle schools: changes in homeroom, recess, and lunch schedules
<b>Subject-Area Programs Provided by Developer</b>	no
<b>Parental Involvement</b>	parent goal-setting conferences; parental involvement in discipline plan and procedures
<b>Technology</b>	e-mail and Internet access
<b>Materials</b>	training manuals, books, audio and video tapes, research reports

## Origin/Scope

The Responsive Classroom was co-founded in 1981 by Marlynn K. Clayton, Ruth Sidney Charney, Jay Lord, and Chip Wood of the Northeast Foundation for Children, Inc. Fifty schools are working collaboratively on schoolwide implementation as part of the Responsive Leadership Forum. Teachers from more than 200 other schools have implemented the model in their classrooms.

## General Description

The Responsive Classroom, developed over a 17-year period, is an approach to classroom management and instructional delivery that teachers use in their daily classroom practice. Based on research in social cognition, developmental psychology, and child development, the Responsive Classroom approach interweaves the teaching of academic and social skills throughout the school day.

The approach consists of six components designed to strengthen classroom management and increase instructional time while building a caring social community for learning:

- 1. Morning Meeting:** Children have an opportunity each morning to practice greetings, listening skills, and conversations as they share stories and concerns. These meetings establish a positive tone for the day.
- 2. Rules and Logical Consequences:** Classroom rules, developed jointly by teachers and students, become the cornerstone of classroom life.
- 3. Classroom Organization:** Classrooms provide space for active interest areas for students and for displays of student work. There is an appropriate mix of whole class, group, and individual instruction.
- 4. Guided Discovery:** Teachers foster children's interest in new learning experiences using a careful introduction to materials, areas of the room, curriculum content, and ways of behaving.
- 5. Academic Choice:** Each day all children have an opportunity to take control of their own learning, both individually and cooperatively.

**6. Assessment and Reporting to Parents:** Teachers work to open multiple lines of communication with parents.

## Results

A University of Wisconsin researcher is conducting a three-year study (1996-99) of the impact of the Responsive Classroom on social skills development and academic achievement in an urban Title I elementary school. The study addresses the question: "Does a classroom promoting social skill development enable higher academic functioning among its students over time?" In the first year of the study, first, second, third, and fourth grade students in one Responsive Classroom school and one non-Responsive Classroom school were assessed in three areas: (a) social skills, (b) problem behaviors, and (c) academic achievement (ITBS scores in math, language arts, and reading). The first assessment occurred in fall 1996 and the second in spring 1997. Teacher ratings showed significantly greater growth in social skills and greater reductions in problem behaviors for Responsive Classroom students than for non-Responsive Classroom students. Over the same period, Responsive Classroom students' ITBS scores increased substantially more than non-Responsive Classroom students' scores. These increases correlated statistically with the changes in students' social behavior.

Other formal evaluations of Responsive Classroom indicate statistically significant gains in cooperative behavior and reductions in problem behavior in classrooms as measured by the Social Skills Rating System.

Over 30 schools that are members of the Responsive Leadership Forum have provided anecdotal information indicating improvement in one or more of the following non-academic areas: school climate, parent involvement, tardiness, attendance, and referrals for discipline. Most noticeable are improvements in recess and lunchroom behaviors, two areas of great concern to many schools. Additionally, the Responsive Classroom laboratory school reported greater than normal growth in CTBS scores in math, language arts, and reading from fourth to eighth grade for three consecutive cohorts of students.

## Implementation Assistance

- **Project Capacity:** The national headquarters of the Responsive Classroom is the Northeast Foundation for Children, Inc., a non-profit educational foundation located in Greenfield, Massachusetts. The headquarters site includes a K-8 laboratory school, a publishing division, and a consulting-teachers division that conducts workshops and training institutes nationwide. One hundred professional educators have been certified or are in the process of being certified as Responsive Classroom trainers. There is also a regional office in Minneapolis and agreements with state education agencies in New York and Pennsylvania.
- **Faculty Buy-In:** The Responsive Leadership Forum is open to schools interested in schoolwide implementation. To be considered for membership, a school must show that administration and staff are willing to try Responsive Classroom strategies, work together, participate in professional development over a period of years, develop specific schoolwide outcomes, and cooperate in research, among other obligations.
- **Initial Training:** Schools typically send teachers to a one-day introductory workshop or have such a workshop conducted at their buildings. Two leaders from each school also attend a weeklong summer institute.

- **Follow-Up Coaching:** A Responsive Classroom Consulting Teacher (one is designated for each school) provides a minimum of eight onsite coaching days per year for three years. During this time, local teachers work to become certified trainers capable of sustaining change over time. Some systems have created part-time or full-time staff positions to provide coaching.
- **Networking:** Two newsletters are published quarterly. Schools are open to visitors in many areas of the country. There are regional refresher seminars for trainers. A Web site is under development.
- **Implementation Review:** Schools develop local evaluation instruments with the assistance of a research consultant contracted by the Foundation. The leadership forum creates new implementation review strategies annually.

## Costs

The Responsive Leadership Forum membership fee is \$3,000 annually, which covers attendance at a summer weeklong institute for two school leaders, quarterly newsletters, and planning consultation with headquarters staff. Local contracts are then developed with individual schools or districts, depending on size, need, and number of days. Annual contracts range from \$15,000 to \$25,000 per school. All training manuals are provided as a part of training at no additional cost. Ancillary resources — books, tapes, and videos — are available at unit and discount prices. On-site consultations are provided to individual schools for 6 to 10 days annually at a cost of \$10,000 to \$25,000 for schools engaged in initial professional development activity with the Northeast Foundation for Children.

For individual teachers and administrators, one-day introductory workshops are \$130 per person, and summer weeklong training institutes are \$450.

## Student Populations

Over the past 15 years, the Responsive Classroom approach has been implemented in schools representing almost every conceivable mix of locale and student population, including an urban, largely Hispanic elementary school in Hartford, Connecticut; an urban, largely African American school in the District of Columbia; a suburban white school in Dover, New Hampshire; a low-income urban school in Springfield, Massachusetts, with Hispanic, African American, and white students equally represented; a small rural school in Vermont; and other urban, suburban, and rural schools in states across the nation.

## Special Considerations

The Responsive Classroom is a model that helps change the structure, climate, and culture of a school community. This rarely happens without causing discomfort for those accustomed to more traditional models. The Responsive Classroom approach is to work voluntarily with those teachers and leaders at a site who are most eager to begin. Over time, other teachers observe and eventually join the effort. A core group of dedicated teachers is, therefore, critical to long-range sustainability. Parent education also is critical. Sometimes staff and parents view this approach as a social curriculum and worry about time spent “away from academics.” It takes training to see that the Responsive Classroom’s primary goal is to increase the integration of academic and social learning in all aspects of schooling.

## Selected Evaluations

### Developer

None available.

### Outside Researchers

Elliott, S. N. (1992). *Caring to learn*. Greenfield, MA: Northeast Foundation for Children.

Elliott, S. N. (1995). *The Responsive Classroom approach*. Washington, DC: District of Columbia Public Schools.

Elliott, S. N. (1998). *Does a classroom promoting social skill development enable higher academic functioning over time?* Greenfield, MA: Northeast Foundation for Children.

## Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch Elig.	ELL	Students with Disab.
			African Amer.	Am. Ind./ Alaskan	Asian Amer.	Hisp.	White			
B. F. Brown Middle School 62 Academy Street Fitchburg, MA 01420 978-345-3278 Contact: Bernard DiPasquale	724	mid-size city	6%	<1%	11%	25%	52%	53%	3%	10%
K. T. Murphy Elementary 19 Horton Street Stamford, CT 06902 203-977-4516 Contact: Larry Nichols	523	mid-size city	22%	1%	5%	32%	40%	38%	27%	4%
Penn Valley Elementary 180 Northturn Lane Levittown, PA 19054 215-949-6800 Contact: Karen Casto	378	urban fringe of large city	3%	1%	1%	2%	94%	23%	M	8%
Barton Open School (K-8) 4237 Colfax Avenue South Minneapolis, MN 55409 612-668-3580 Contact: Steven DeLapp	610	large city	25%	4%	13%	8%	49%	21%	4%	12%
Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year. M = Missing data.										

### For more information, contact:

Chip Wood  
Northeast Foundation for Children  
71 Montague City Road  
Greenfield, MA 01301  
Phone: 800-360-6332  
Fax: 413-772-2097  
E-mail: chip@responsiveclassroom.org  
Web site: <http://www.responsiveclassroom.org>

## Success-in-the-Making (K-9)

IN BRIEF Success-in-the-Making	
<b>Founder</b>	Patrick Suppes and Mario Zanotti of Stanford University and NCS Learn
<b>Current Service Provider</b>	NCS Learn
<b>Year Established</b>	1967
<b># Schools Served (Jan. 1999)</b>	16,000 schools have used SuccessMaker software
<b>Level</b>	K-9
<b>Primary Goal</b>	increased achievement in reading, language arts, and mathematics
<b>Main Features</b>	<ul style="list-style-type: none"><li>computer-assisted instruction designed to meet individual learning needs</li><li>mastery learning model</li><li>balanced instruction focusing on basic skills and higher-order learning processes</li><li>multiple types of assessment and reporting embedded in the software</li></ul>
<b>Impact on Instruction</b>	data derived from students' use of software can inform regular classroom instruction
<b>Impact on Organization/Staffing</b>	site coordinator is recommended
<b>Impact on Schedule</b>	at least one hour per student per week in both mathematics and reading instruction
<b>Subject-Area Programs Provided by Developer</b>	yes (reading, language arts, mathematics)
<b>Parental Involvement</b>	student progress reports and portfolios are shared with parents
<b>Technology</b>	stand-alone computers and peer-to-peer, LAN, and WAN networks; cable and Internet capabilities for at-home learning
<b>Materials</b>	over 5,000 hours of instructional material including software, authentic literature, multimedia, activities, projects, and other resources; teacher guides

student's path through the material. Students are able to complete increasingly more difficult work, as measured by embedded assessments aligned to external testing objectives and state standards.

Consultants work with local educational leaders to develop implementation plans based on district and site goals. Typically, students complete individualized instruction several times a week; teachers then add individual or collaborative lessons and activities relating to classroom learning to achieve greater curriculum integration.

Data derived from student work can help teachers plan and improve both computer-assisted and regular classroom instruction. For example, reports show areas where students are having difficulty so that teachers can coach students in small groups. Data also can furnish information for program guidance at the school and district levels.

### Origin/Scope

The Success-in-the-Making approach was developed in 1967 by Patrick Suppes of Stanford University, and Mario Zanotti, a nationally renowned psychometrist, based on the belief that the use of technology in the classroom can accelerate student learning. Software based on the developers' approach has served more than 2 million students in 16,000 schools across the country.

### General Description

The core of Success-in-the-Making is the NCS Learn SuccessMaker® software, which provides computer-assisted instruction in reading, language arts, and mathematics from kindergarten through ninth grade. SuccessMaker adapts curriculum content for each user, evaluates student responses on problems and activities, and offers a management system for monitoring student progress.

Based on the mastery learning model, the software automatically determines each

As part of the model's options, teachers can offer authentic literature, writing tools and process instruction, and open-ended tools-based mathematics for all levels. Schools can also provide Spanish-English bilingual and ESL content for various levels and components.

## Results

Using SuccessMaker software to support student learning, multiple schools have documented gains in student achievement in reading and mathematics, as evidenced by standardized tests and state proficiency exams. For example, 13 schools in New York's District Six were selected to implement the model, based on low performance on the third-grade state-mandated reading test. After implementation, post-test results showed a higher percentage of these third-grade students reaching or exceeding the State Reference Point than third-graders districtwide. In Landisville, Pennsylvania, longitudinal data on over 500 students using the math software, tracked from third to sixth grade, showed the mean percentile of the group rising from the 70<sup>th</sup> percentile in third grade to the 80<sup>th</sup> percentile in sixth grade, as measured by the California Achievement Test. The percentage of students in the lowest quartile dropped from 12 percent to 6 percent, and the percentage of students in the top quartile increased from 41 percent to 59 percent. In Fort Worth, Texas, students using the software for one year at three schools with schoolwide Title I projects showed significant gains on the Texas Assessment of Academic Skills (TAAS). The mean gain from 1996 to 1997 for grades four and five was 8.0 Texas Learning Index units. Similar gains were reported for reading.

Additionally, survey results from multiple school sites indicate that students involved in Success-in-the-Making demonstrate an increase in self-esteem and a more positive attitude toward learning.

## Implementation Assistance

- **Project Capacity:** This model is offered through four regional offices located across the United States, with 130 consultants providing professional development. Consultants also can prepare district staff to train teachers and support local programs through EdPro certification courses offered several times a year.
- **Faculty Buy-In:** Consultants encourage school and district processes that include teachers in selecting the program and making decisions on program options.
- **Initial Training:** Orientation and planning activities involving administrators or other leaders take a minimum of one day. Initial training for all teachers and instructional staff involved with the model generally includes three days to introduce content, tools, and basic management system functions; show participants self-help resources; and discuss initial program implementation issues, such as enrollment and scheduling.
- **Follow-Up Coaching:** Assistance in generating and interpreting reports is a standard follow-up component. Several days of site support are recommended each year for informal coaching and training. Consultants model new ways to teach — including multimedia teacher presentations and interactive group activities using technology — and share classroom and laboratory/center management techniques.
- **Networking:** Toll free numbers to reach consultants and technical support, e-mail addresses, program newsletters, and events for EdPro "graduates" help educators stay informed. Seminars enable schools to share information. Teachers and administrators also can communicate and collaborate through an educational Web site.

- **Implementation Review:** Model guidelines suggest a quarterly review of implementation, including review of summarizing reports. This review is usually conducted with the site administrator or governance group.

## Costs

Costs vary depending on the size of the model due to volume discount pricing and the amount of professional development desired. Costs for a typical elementary school with computers in the classrooms range from \$362 to \$602 per student for a three-year program (or \$121 to \$201 per student per year). Lower costs are possible if schools have a computer laboratory, which can serve larger numbers of students for a given number of computers. Release time and budget for substitutes for two to three days of initial training at the beginning of the program and for new teachers in subsequent years also needs to be included.

## Student Populations

The program provides instruction for diverse learning needs, including mainstream, gifted, special education, ESL, Spanish-English bilingual, and at-risk populations. Adaptive devices serve students who have difficulty using standard computer equipment.

## Special Considerations

Helping administrators and teachers learn new ways of delivering and assessing instruction requires ongoing professional development and site support. Each school is advised to plan for a minimum of 15 days of professional development over a three-year period.

## Selected Evaluations

### Developer

1997-98 *Duval County CCC implementation overview and summary of findings*. (1998). Sunnyvale, CA: CCC Research and Measurement Department.

Zanotti, M. (1997). *Fort Worth Title I, 1996-97*. Sunnyvale, CA: CCC Research and Measurement Department.

Zanotti, M. (1998). *Southfield Public Schools evaluation summary August 1997*. Sunnyvale, CA: CCC Research and Measurement Department.

Zanotti, M., & Smith, N. (1995). *Effectiveness of the CCC CAI Program: Philadelphia Parochial Schools global evaluation for 1994-95*. Sunnyvale, CA: CCC Research and Measurement Department.

### Outside Researchers

*Community School District Six Integrated Technology Reading Support Project: First year evaluation report 1995-96*. (1996). New York: Metis Associates.

Laub, C. M., & Wildasin, R. L. (1998). *Student achievement in mathematics and the use of computer-based instruction in the Hempfield School District*. Landisville, PA: Hempfield School District.

*Second year evaluation report 1996-97*. (1998). New York: Metis Associates.

Underwood, J., with Cavendish, S., Dowling, S., Fogelman, K., & Lawson, T. (1994). *Integrated learning systems in U.K. Schools: Final report*. Leicester, UK: Leicester University, School of Education.

## Sample Sites

No sample site data available.

## For more information, contact:

JD Dyas  
NCS Learn  
5421 East Williams Boulevard, Suite 151  
Tucson, AZ 85711

Phone: 888-627-5327  
Fax: 520-615-7601  
E-mail: [paul.dyas@ncslearn.com](mailto:paul.dyas@ncslearn.com)  
Web site: <http://www.ncslearn.com>



**U.S. Department of Education**  
Office of Educational Research and Improvement (OERI)  
National Library of Education (NLE)  
Educational Resources Information Center (ERIC)



## **NOTICE**

### **Reproduction Basis**



This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.



This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").